

MILITARY AFFAIRS

VOLUME XIX



NUMBER 2

SUMMER

1955*

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*Publication Date, July 1955

Published by the American Military Institute

DEVOTED TO AMERICAN MILITARY (INCLUDING NAVAL AND AIR) HISTORY

WASHINGTON, D. C.

Annual Subscription \$4.00

\$1.00 per Copy



MILITARY AFFAIRS is published quarterly by the American Military Institute. One copy of each issue is supplied to members. Annual subscription to nonmembers is \$4.00. The prices of single issues of the current volume and of back issues except Volume I, Numbers 1 and 2 is \$1 and will be furnished on request. Correspondence regarding subscriptions, editorial contributions, membership, books for review, etc., should be addressed to the American Military Institute, 1529 - 18th St., N. W., Washington 6, D. C. Entered as second-class matter at the postoffice at Baltimore, Md., under the Act of August 24, 1912.

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THE ROLE OF AIR POWER IN RECENT HISTORY

Three papers presented at the
Joint Session of the American Military
Institute and the American Historical Association
at the annual meeting of the AHA, 29 December 1954,
Hotel Commodore, New York City.

STEFAN T. POSSONY, *Chairman*

I

THE IMPACT OF AIR POWER ON THE INTERNATIONAL SCENE

1933-1940

By HERBERT S. DINERSTEIN*

It is appropriate, at a time when the world resounds with the alarms and fears produced by nuclear weapons, to look at the way in which political leaders, only a generation ago, dealt with the untried weapon of that time. Between 1933 and 1940, two main features characterized Western European attitudes toward air power: (1) Air power was generally misunderstood at the top political level, more so in England and France than in Germany; (2) the exaggerated fear of air power abetted Nazi aggression until 1939. Although it is probably true that misinformation and misunderstanding play their roles today, it would be erroneous to assume that today's distortions are just like yesterday's. This paper will seek only to examine the situation as it existed between 1933 and 1940, without any reference to present-day attitudes.

It is useful to examine the German view of air power first, since it was the most realistic. Whatever the German air enthusiasts

who believed in the supremacy of air power may have said and written, they had no great influence on the structure of the German air force before the Second World War. By and large, the generals in charge of the German air force came from the German land forces and were firm advocates of the combined operations of air and ground forces. Reading General Kesselring's memoirs we are struck by the excellent relations he maintained with ground force generals, many of whom were his former colleagues.¹ This is in contrast to the recorded recollections of British and American air officers. In the traditional continental concept of warfare, shared by the German General Staff, the probable situation after the conclusion of the war was accorded great importance. There was little disposition to plan the kind of war that would result in the conquest of destroyed and relatively useless countries. As the German General Staff planned to engage in a victorious war, this attitude was natural.

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¹Albert Kesselring, *Kesselring, A Soldier's Record* (New York, 1954), *passim*.

In the British conception, on the other hand, more emphasis was placed on attrition. The state of the beaten enemy received less consideration. Because Great Britain never had large land forces, it had to preserve the balance of power by maintaining a large navy. But often a navy is used mainly as a weapon of attrition and, in a war between a land power and a naval power, the large armies win the first victories on land, whereas the naval power, at the end of the war, reaps the benefit of cumulative attrition.² This contrast between the British and the Germans seems to contradict the common—and accurate—picture of Hitlerian savagery and destructiveness. The latter was a dominant element in Hitler's actions, but it was interspersed with cold calculation. It will be recalled that Hitler's war plan for Czechoslovakia specifically instructed the air force to keep at a minimum the destruction of property that later could be useful to the Germans. Despite the alternating tendencies in Hitler's own attitudes, the whole philosophy of the German General Staff was permeated by the traditional attitude toward warfare. The image of German air supremacy at the outset of the Second World War is still so vivid that it is difficult for us to realize that the German air force was not particularly designed for bombing.

The British military attaché in Germany, writing in February of 1939, made an estimate of the German air force which has withstood the test of time. He did not believe that the German air force had "been built up with a view to attacking any particular enemy. Its organization, equipment, the distribution of units has up to now given little indication of any strategical design and rather conveys the impression that the aim has been to build up the strongest possible air force in as short a time as possible."³ A

German general, writing after the war, complains that the Luftwaffe had neither a clear doctrine nor a consistent long-range strategic mission, a fact which, in his opinion, explained its defective planning.⁴ Although after a lost war such sentiments on the part of the loser are quite understandable, they do not do justice to German planning. No country's military forces are ever prepared for precisely the kind of war they have to fight. The future is too uncertain to permit such accuracy in prediction and planning. The important point for us is that Germany, before the Second World War, could not have defeated one of its major opponents by an aerial campaign.

Hitler's own views about air power—like many of his views on other subjects—were a mixture of incisive realism and ignorant confusion. In a briefing to generals in May, 1939, Hitler said: "If the German Air Force attacks English territory, England will not be forced to capitulate in one day, but if the fleet is destroyed, immediate capitulation will be the result." A little later in his address he said: "A country cannot be brought to defeat by an air force."⁵ Hitler's estimate of the future was much more realistic than that of high political figures in England and France. Hitler was very much alive to the importance of air power, without exaggerating it. One of the objectives in Hitler's desire to occupy Czechoslovakia was to eliminate the possibility that the Russian air force might use Czech bases.⁶ Hitler also

³"Group Captain Vachell to Sir N. Henderson, Berlin, February 15, 1939," *Documents on British Foreign Policy 1919-1939* (edited by E. L. Woodward and Rohan Butler, Third Series), IV, 117-20. Hereinafter cited as *British Documents*.

⁴Generalleutnant Alof Galland (Ret.), "Defeat of the Luftwaffe: Fundamental Causes," *Air University Quarterly Review* (Spring, 1953), p. 24.

⁵"Minutes of a Conference on 23 May 1939. A briefing by the Führer on political situation and future aims," *Nazi Conspiracy and Aggression* (Washington, 1946), VII, 852-853.

⁶"Directive for the unified preparation of the armed forces for war (valid from July, 1937, until presumably

²See B. H. Liddell Hart, *The Revolution in Warfare* (New Haven, 1947), pp. 87-90.

realized that, because of the short range of the bomber of 1938 and 1939 (and the necessity for fighter escort), it was important to have bases close up. Therefore, he was keenly interested in gaining bases in the Low Countries, which would put much more of England inside the range of German bombers. It has been forgotten, or was never really understood, that many British air bases and factories were out of range of German bombers even after the fall of France.⁷

So much for Hitler's impressive understanding of the role of air power. However, Hitler had some queer notions. He (and Chamberlain) believed, for instance, that gas attacks delivered from air planes might play a role in war.⁸

Although Hitler grasped the fundamentals of air power, he made some serious errors. One of the major mistakes flowed from the misuse of his air force for blackmail. In 1935 he told the British foreign minister, Sir John Simon, and Anthony Eden that Germany had achieved air parity. This was totally untrue.⁹ Hitler wanted to frighten the British, and frighten them he did. He frightened them into building an adequate air force. On the eve of the war Hitler did not realize how far the British had come, partly as a result of his threats. Hitler said at that time: "Where can they attack me? In the air? People try to impress me with figures and demonstrations of rearmament, especially in the air. (Hysterical laughter.)

I laugh, it is I who am the specialist in rearmament, not the others. Their air force!"¹⁰ Even more serious than Hitler's underestimation of Britain's rearmament was his failure to realize that the British had a reasonable chance of augmenting their air strength with American assistance. His fundamental error was in believing that the war would be short (ending in a negotiated peace with Great Britain) and that the United States would not participate. Hitler expected, and he was one of the few Germans and Europeans who did, that his armies with the assistance of the air force would conquer Poland, the Low Countries, and France easily and that then the war would be finished. Had he been right here, his air force would have been designed perfectly. But, since he was wrong, his air force was inadequate.

* * *

At the outbreak of the war, the R.A.F. was very far from what R.A.F. generals had wanted. Immediately after the First World War, the leaders of the newly independent British air force developed a vaulting doctrine of air power. Air power was to be neither an adjunct to ground operations nor a minor reconnaissance weapon, but the bomber was to produce the decisions in the future war by destroying the industrial resources of the enemy. Later, this view came to be associated with the writings of Douhet, but it is fairly clear that this was the governing doctrine of the R.A.F. long before Douhet's theory had become very widely known. Most British air marshals in their memoirs disclaim ever having read Douhet.¹¹ Marshal Slessor recalls that the phrase "knockout blow" made "a pretty frequent appearance in the contemporary documents and discussions." The British air theoreticians had the right prediction but the wrong year, 1938 instead of 1944.

¹⁰"Verbatim record of the interview between M. Burckhardt and Hitler on August 11, 1939," *British Documents*, VI, 692.

¹¹B. H. Liddell Hart, *op. cit.*, pp. 9, 87.

September 30, 1938)," *Nazi Conspiracy and Aggression*, VI, 10009.

⁷Kesselring, *op. cit.*, p. 72.

⁸"Note of a Conversation between the Prime Minister and Herr Hitler, September 30, 1938, at the latter's Flat in Munich," *British Documents*, II, p. 636; "Memorandum of the Conversation between the Führer and Chancellor and the Royal British Ambassador in the Presence of the Foreign Minister von Ribbentrop on March 3, 1938, in Berlin," *Documents on German Foreign Policy* (Washington, 1949), Series D, I, 245.

⁹General Baron Geyr von Schweppenburg, *The Critical Years* (London, 1952), p. 245.

With the advantage of hindsight it is clear that this error contributed to the British misunderstanding of the relative power of Germany and Great Britain. The emphasis on the knockout blow¹² helped create the atmosphere in which Hitler could use his air strength to frighten his opponents into retreats. There was no lack of conviction within the R.A.F. on the importance of the bomber, but there was lack of funds. Hitler's blustering revelation that he had attained air parity with the British was the greatest stimulus to British rearmament. Neville Chamberlain himself preferred to spend funds on an air force rather than on the fleet or the army. He felt that the deterrent and defensive capabilities of the air force had the first call on British resources.¹³ But as late as the end of 1937, Chamberlain was complacent about the situation. Churchill, in his memoirs, records that "during these November [1937] days, Eden became increasingly concerned about our slow rearmament. On the eleventh, he had an interview with the Prime Minister and tried to convey his misgivings. Mr. Neville Chamberlain after a while refused to listen to him. He advised him to 'go home and take an aspirin.'"¹⁴

Quite early, the R.A.F. realized that it had overestimated the offensive and began to devote attention to defense. In August, 1935, the first beginnings of radar were appreciated for what they would ultimately be able to do in a warning system.¹⁵ Of equal importance was Royal Air Force efficiency in developing new fighter planes. The importance of the fighter had been underrated in 1937 and in 1938, and this mistake was not corrected

until the last expansion plan was launched in the winter of 1938.¹⁶ Thus, at the time of Munich and in 1939, the British air force, and to a greater extent the British civilian heads of the government, exaggerated both the number and the performance of German planes. It is not surprising that in this situation Chamberlain would cling to any hope of restricting the use of bombers in warfare.

In January, 1938, the British raised with the Germans the question of the abolition of bombing planes, but the German Foreign Office gave no answer. When Ambassador Henderson raised the question Hitler rejected the proposal because of the impossibility, he said, of trusting the Soviet Union.¹⁷ It was hardly to be expected that the Germans would relinquish their superiority in air strength—a superiority which had already produced such results without being put to the test. The British, who had fewer bombers than the Germans, tried to limit their use in the war by a strict policy of no "air action against any but purely military objectives in the narrowest sense of the word."¹⁸ An extreme example of British care, at the outset of war, not to provoke the German bombing force is furnished by a conversation of Leopold Amery with Kingsley Wood, then the Air Minister. Amery had suggested that the Black Forest which was packed full of munitions and stores, would be a very good target for incendiary bombs. It had been a dry summer, the rain might come at any moment, and a unique chance might be lost, probably forever. "Kingsley Wood turned down the suggestion with some asperity. 'Are you aware it is private property,' he said. 'Why, you will be asking me to bomb Essen next!'"¹⁹

¹² Marshal of the Royal Air Force Sir John Slessor, "Air Power and the Future of War," *The Journal of the Royal United Service Institution* (August, 1954), p. 345.

¹³ Keith Feiling, *The Life of Neville Chamberlain* (London, 1946), pp. 258, 314.

¹⁴ Winston S. Churchill, *The Gathering Storm* (Cambridge, U.S.A., 1949), p. 250.

¹⁵ Sir Philip Joubert, *The Fated Sky* (London, 1952), p. 109.

¹⁶ Slessor, *op cit.*, p. 344.

¹⁷ *Documents on German Foreign Policy*, Series D, I, 174, 175, 182, 185, 240-250.

¹⁸ *British Documents VI*, 766.

¹⁹ Major-General Sir Edward Spears, *Assignment to Catastrophe, I: Prelude to Dunkirk* (London, 1954), pp. 31-32.

It has been argued since the war that, whatever Chamberlain's faults in pushing British rearmament, he had no choice in 1938 but put off the war until Britain could be in possession of an adequate defensive air force. This argument has a certain appeal, since there is no question but that Great Britain was weaker in the air in 1938 than in 1939 and 1940. These arguments about what might have happened are very hard to resolve, but it is appropriate to point out that Churchill, who is not usually given to recriminations about the past, argues that, true enough, in 1938 there would have been air raids in London for which the British were unprepared. But, he says, there could have been no decisive battle of Britain until the Germans had occupied France and the Low Countries and thus obtained the necessary bases for escorting their bombers.

Churchill believes that the Germans could not have defeated the French in 1938 or 1939, partially because their vast tank production did not show until 1940. Only when they were free in the East could they have concentrated all their air power on England. Besides, at the time of Munich only thirteen divisions were on the Western front, whereas in 1939 there were forty-two divisions.²⁰ It can be argued with some cogency that, if Chamberlain had understood the situation, he need not have surrendered so much military and political advantage to the Germans in 1938. Arguments from hindsight are always somewhat unfair, but the conclusion remains—and this is of importance to the thesis of this paper—that misinformation and misunderstanding of air power played an important role in British decisions in 1938.

The French were in a very much worse position than the British with respect to air power. There is little point in repeating the dreary details of the French lack of preparedness. Briefly, the French relied on the

Maginot Line, and, although they were quite frightened by German air power, they could never muster the energy to develop an air strength of their own, as the British did. At Munich, the French seemed to welcome British pressure on them not to go to the defense of Czechoslovakia, and in their justifications they gave most weight to the German supremacy in the air. The French were strengthened in this conviction of their weakness by the report of Lindbergh, who had visited Russia and Germany with the purpose of appraising their air strength.

Lindbergh's report was dismal enough. He had been forced to the conclusion that the German air fleet was stronger than those of all the other European countries combined.²¹ This was surely a mistaken estimate, but French Foreign Minister Bonnet compounded the error. Lindbergh had said that he could give no opinion as to the number of planes in production in Germany or in any other country, but the British ambassador reported Bonnet as saying that Lindbergh "had returned from his tour horrified at the overwhelming strength of Germany in the air and the terrible weakness of all other Powers. He declares Germany has 8,000 military aeroplanes and can turn out 1,500 a month. M. Bonnet said that French and British towns would be wiped out and little or no retaliation would be possible."²² The British military attaché in Paris summarized the effect of Lindbergh's report as follows: "... pointed at Paris (and at London) is the threat of the German Air Force, and the Führer found a most convenient ambassador in Colonel Lindbergh, who appears to have given the French an impression of its might and preparedness which they did not have before, and who at the same time confirms

²¹John W. Wheeler-Bennett, *Munich Prologue to Tragedy* (New York, 1948), p. 99. Wheeler-Bennett has consulted Lindbergh's record of his conversation with the air minister.

²²*British Documents*, II, 310.

²⁰Churchill, *op cit.*, pp. 339, 384.

the view that the Russian Air Force was worth almost nothing."

On September 22, the British military attaché spoke to General Dentz, who informed him sadly that the Germans would occupy Czechoslovakia on the 24th of September. The British military attaché reports:

I said, "What then, since you don't intend to fight?" and went on to suggest that the situation had deteriorated since Colonel Lindbergh's visit and his stories of the German Air Force. General Dentz did not react; he merely pointed out that French cities would be laid in ruin and that they had no means of defence. They were now paying the price of years of neglect of their air force.²³

Some of the figures on the French right conjured up horrible pictures of the result of air warfare. Flandin told the British ambassador that, if there were initial reverses and heavy air bombardment, the French population would agitate for an early peace. Communist leaders, who were the most active in asking for war, were already saying that, if there were heavy air bombardments, France would go communist. Caillaux predicted that, if there were heavy bombardments of factories around Paris, another Commune might result.²⁴

There is no question but that, at the time of Munich, the French explained, and to some extent justified, their surrender by their weakness in the air. When for a moment they seemed inclined to consider a course other than yielding to Hitler, Chamberlain reminded them of their weakness in the air. On September 25, when the British and French were discussing whether to give Hitler parts of Moravia immediately, Daladier was most reluctant and even went so far as to compare himself to a barbarian. If the Germans actually marched on Czechoslovakia without accepting the very intensive concessions already made, then France, said Daladier, would un-

dertake offensive operations and bomb German factories and military centers. The official British account of this conference records that Chamberlain "wished to speak quite frankly and say that the British government had received disturbing accounts of the condition of the French Air Force and of the capacity of the French factories to maintain supplies for the air force. . . . He therefore felt he must ask what would happen if war had been declared and a rain of bombs descended upon Paris, upon French industrial districts, military centers and airdromes? Could France defend herself and was she in a position to make an effective reply?"

When Daladier answered, he took a stronger line than usual. He admitted that the French air force was inferior to the German only in materiel, not in the quality of its pilots, and insisted that France could attack Germany by air. He understood that Russia had about 5,000 planes of good quality, and he dismissed Lindbergh's remarks about speed because "what really mattered was the total number, and in this respect Russia could hold her own with Germany."²⁵

Daladier's misconception about the importance of the quality of airplanes is interesting, but even more interesting is his reversal of position. When he felt that France could not fight, then the French air force was terrible. When he felt that France had to fight, then the French air force was not so bad, and, quite without basis, he included 5,000 Russian planes on the French side. Estimates of strength even at critical times, or perhaps especially at critical times, seem to be emotional rather than reasoned.

This analysis of the role of false estimates and misjudgments about air strength shows how dangerously fear and emotion warp the judgment of intelligent men. A miasma surrounded the subject of air power, and those

²³*Ibid.*, pp. 454, 473-474.

²⁴*Ibid.*, pp. 509, 513.

²⁵"Record of an Anglo-French Conversation held at No. 10 Downing Street on September 25, 1938," *British Documents*, II, 520 ff.

who advocated concessions to the enemy—which made him stronger—were the ones most mistaken in their estimates. Responsibility for this fog was widely divided. The British air force had for years been talking about the knockout blow—a prediction which was accurate for the aeroplanes of 1944 but not for those of 1938 and 1939. When, in 1938, the British believed that the Germans had a larger air force than they actually had, it was not surprising that they feared a knockout blow from the Germans. The prospect of a “knockout blow” from the Germans was repeatedly mentioned by Neville Chamberlain in his conferences with the French.²⁶ We can only surmise how often he used this phrase in cabinet meetings. His fears of bombing were certainly vivid.²⁷ He also frequently referred to gas attacks from the air—a possibility which had no support at all in military studies at the time.

The British Ambassador in Berlin, Nevile Henderson, one of the most vigorous proponents of appeasement, wrote to the British foreign secretary in October, 1938, that the Germans had a first-line strength double that of the British, and that they were far ahead of them in design and performance and were producing a thousand airplanes a month. All this was dead wrong and was not accepted by the very capable and sober

British air attaché in Berlin.²⁸ Why Henderson trusted his own analysis, based partly on direct information from Göring, rather than that of his expert air attaché is not easy to say. Panic and arrogant belief in the correctness of his judgment on a complex matter seem likely explanations.

The unknown and the indefinite are always fearsome. Many contributed to this confusion. Churchill remarked after the event: “. . . had we not all been taught how terrible air raids would be? The Air Ministry had, in natural self-importance, greatly exaggerated their power. The pacifists had sought to play on public fears, and those of us who had so long pressed for preparation and a superior air force, while not accepting the most lurid forecasts, had been content that they should act as a spur.”²⁹

But once the issue was settled and the decision was taken to fight over Poland, the panic talk about air power almost disappeared. In August, 1939, an old friend of Churchill's reported that “what worried Winston most, apart from fearing the Government would run out over Poland as it had over Czechoslovakia, was our weakness in the air. He came back to this again and again.”³⁰ But worry is different from panic. Concern based on a true appraisal of the situation can bear good fruit. And so events proved.

II

THE ROLE OF AIRPOWER SINCE WORLD WAR II

DALE O. SMITH*

Brigadier General, USAF

For the three centuries of American exist-

ence we generally have believed ourselves to be isolated from the rest of the world. This

²⁶Record of Anglo-French Conversations held at No. 10 Downing Street on April 28 and April 29, 1938.” *ibid.*, I, 204.

²⁷Feiling, *op. cit.*, p. 321.

²⁸Appendix I (ii), letter from Sir Nevile Henderson to Secretary of State . . . October 12, 1938,” *British Documents*, III, 616.

²⁹Churchill, *op. cit.*, p. 408.

³⁰Spears, *op. cit.*, p. 3.

*General Smith is with the Operations Coordinating Board in Washington and is the author of the recently published *U. S. Military Doctrine* (Boston: Little, Brown & Co., 1955).

has been an attitude of mind more than a fact of life, because we *have* been embroiled repeatedly in foreign wars. Still we have felt these were wars of choice, and after fighting them we often have questioned the wisdom of the choice. In other words, we were deluding ourselves that we could stay out of foreign wars, if we willed to do so.

Our physical isolation, surrounded as we were by oceans and arctic wastes, provided us with the arguments to rationalize our belief that isolation was possible. Surface-bound military forces could not readily invade us.

With the advent of air power and atomic munitions, all of our arguments for isolation have evaporated. Now we know that we are nakedly exposed to military power located half-way around the world.

This, to my mind, is the greatest impact air power has had on our lives. Military isolation is irrevocably a thing of the past.

Formerly we could exist in a relatively unarmed condition. When a decision was made for war, we could then mobilize, train and re-gear our whole society before large-scale fighting was necessary. Now we must be prepared to fight and win instantaneously.

Formerly, we could forget about war until the war-clouds formed. Now war-clouds are always with us. Now we must consider war as an ever-present threat. This reality is most difficult for us to accept.

Formerly, we could keep military thought and learning locked up in small regular establishments. Military learning was not accorded the respect of other bodies of knowledge such as medicine or law. Now the problem of national security is so grave it must be shared by all.

Formerly, we could devote almost our full attention to domestic problems. Prosperity was our primary objective. Now, whether we have come to believe it or not, our very survival is of greater importance than our prosperity and well-being. Our old hierarchy of

values has been upset.

So you see, atomic air power is causing us to undergo a social revolution. Adjustment to the new and foreboding world that air power has ushered in, is a painful task for us all. And few of us, I fear, have made this painful adjustment.

Now let's translate some of these social changes into the specific.

We are keeping something in the order of three million men under arms. Compare this with the one-quarter million of 1930! We agree that this standing force of three million is a rather permanent necessity. The Government has told us that we must gear ourselves to the "long haul". This is not in keeping with the minute-man concept under which we operated during our long period of isolation.

We have a large standing force because we know it must be ready instantly. But do we think in terms of instantaneous war? No. We do not. We still plan for mobilization. We have not been able to shed the vestiges of our isolation background. We still talk of preparing for war *after* it has occurred. And we plan to manufacture and deliver weapons and supplies while undergoing atomic attack. Is the vast destructive power of air weapons, combined with their offensive capacity, being considered in this thinking? We still regard war as a slow-starting, slow-moving struggle. Even the composition of our standing forces is subject to our vision of a war in the image of the last one.

We will have *no* time to recover from an atomic Pearl Harbor. *No* time to mobilize. *No* time to go into war production. *No* time to train. The blows will be exchanged so quickly that our industrial potential will probably never be a factor *after* the war starts.

Yet we plan for World War two and a half rather than for World War III. We have always come out on top before, we say,

even though unprepared. But atomic air power will *never* again permit us that cushion of time.

We must fight the war on our fat. With the forces in-being and the stocks on hand. It will end before we have time to build another gun or another plane, even if the factories are left standing.

We avoid recognition of the ever-present threat of war by wishful thinking. And this is the most dangerous aspect of our social revolution. We say, in all sincerity, that war itself must be avoided and we cast about frantically for means to prevent it. We say that mass-destruction weapons will lead to a stalemate and an armed truce. Yet if war begins in the minds of men, the kinds of weapons will likely have small influence on a decision for war. The frightfulness of war (and it has always been frightful) has never deterred its propagation.

We are belatedly discovering the wasted state of our body of military knowledge. Vast research programs have been started by government, and service schools have been augmented. *Yet*, this has all been done in the framework of our isolation background. National defense is a government problem, we say, rather than an individual problem. Except for government subsidies in the form of ROTC, national defense is largely ignored in our great educational system. Few individuals feel compelled to advance military knowledge as they would, say, the knowledge of public administration or of foreign affairs.

I have a 300-page book in my office, *U.S. Citizens in World Affairs*, listing private organizations devoted to the study of foreign affairs. It lists about two such organizations on each page. A total of about 600 associations. A book listing the private associations devoted exclusively to military study would be a one-page volume, with one listing: the American Military Institute!

If the age of peril requires that our atten-

tion be focussed on military matters, it is obvious that the government cannot bear this whole responsibility. Already 70% of our national budget goes to pay for past or future military activities. If we want smaller government we must, as individual citizens, assume more national defense responsibilities. Every citizen must feel obligated not only to bear arms, but to learn about military matters and attempt the solution of military problems. And the study of war must be introduced in schools.

The Social Science Research Council is fostering studies on military policy. This is an example of what I mean. Most foundations would consider this kind of study a government responsibility, to be financed entirely by federal funds.

I do *not* wish to imply that war is inevitable, but in the course of human existence war has certainly been *habitual*. And in the present scene I see few changes that present much hope for breaking that bad human habit.

Belief that the existence of nuclear weapons will produce a stalemate, is typical of the military misunderstanding that prevails in our thinking today. Mounting fear and increasing power at two opposing ideological poles has never been a condition which has been conducive to peace. This condition may deter general war—it already has, as witness Korea—but to assume that this deterrent will carry on indefinitely is certainly not borne out by the facts of history. At sometime or other we can expect one side to become so fearful of threats to its security, real or imagined, as to go to any lengths to relieve its fear. War is the inevitable climax of the historical trends we are witnessing.

History is replete with broken good intentions and with unpredicted events which have sent passions soaring to violence and extremes.

I see no reason to believe that these aspects

of human life have changed or that mankind has evolved into some new species one notch above the *Homo-sapiens*. We must accept this premise if we are to do any clear thinking about national defense.

The scope of the social revolution brought on by air power is too comprehensive to do more than recognize it here. I would like, therefore, to speculate upon one particular aspect of it, the one which concerns us most if we accept the premise that general war is possible.

What form might war take?

World War I introduced the rapid-fire gun, which, with advance designs in fortification, gave defensive war a distinct advantage.

World War II introduced the airplane as a decisive weapon. Air power dominated all combat. Air superiority became a requisite for surface victory.

But of far greater importance, the last year and a half of war saw air power not only dominating the battlefield, but dominating the enemy nation itself. This we called strategic bombardment. The *U.S. Strategic Bombing Survey* flatly concluded that no nation could survive if an enemy had free access to its skies.

And although air defense seemed to have promise during the Battle of Britain, later developments saw the highly efficient and well-integrated German air defense completely overwhelmed by penetrating allied aircraft. The offensive capability of air power continued to grow at the expense of the defense.

How has this changed with more recent developments? Let us hear from General Twining, Chief of the United States Air Force.

Last year (25 December 1953) General Twining was interviewed by *U.S. News and World Report* as follows:

Q. "Hasn't the introduction of the high-

speed plane itself altered the strategy of war?"

A. "Yes, it has, but each side is stepping up its speed so speed becomes relative. The high-speed plane with high-altitude performance *has improved the offensive capability of both sides*. You can penetrate defenses much better with the high-speed, high-altitude plane than you could with the low-altitude, low-speed plane."

Q. "Which is on top now—offensive or defense?"

A. "Right now I'd say it's the offense."

The short history of air power has demonstrated that determined air attacks cannot be stopped. The defense in air war has *always* been at a disadvantage regardless of the stupendous resources devoted to elaborate warning and control systems and strong interception forces.

Atomic munitions which give one aircraft the destructive power of 300 TNT-loaded bombers, or considerably more H-weapons, upsets the offensive-defensive balance still more. The scales are well down in favor of the offensive.

General war, then, takes on the complexion of a gigantic duel. Two countries trading mighty blows until one succumbs. Neither can stop the other. This is not a pleasant picture, but the consequences of war have never been pleasant. And seldom does a country seek war, yet wars persist. There may be some comfort, however, in the evidence that such a war might be exceedingly brief. One or the other belligerent will succumb before civilization expires.

History does not show that the increase of fire power has had any tendency to encourage wars of extermination. It is the temper of the human beings engaged that determines what extremes a war will take before hostilities cease. The intense emotions of fear and hate make the difference, not a certain kind of bomb.

The third Punic War led to the extermination of Carthage not because new weapons were forged, but because after two previous wars with Carthage, the Roman temper was so riled as to desire wholesale massacre. Although guns were developed during the horrible Thirty Years War, these weapons were crude. Yet the inflamed passions of Europe rose to such a height that an estimated three-fourths of the German-speaking people perished in a shocking war that some historians consider the most cruel ever suffered by Europe. On one occasion the city of Magdeburg was sacked and its entire population of 30,000 put to the sword. Starvation was so acute that cannibalism was practiced in some localities.

Weapons, notably firearms, continued to improve, but the century and a half between the Thirty Years War and the Napoleonic Wars was relatively benign. In the 19th Century the doctrine of massed manpower tended to involve more troops, yet only the Napoleonic Wars and the American Civil War created casualties in the millions. Several other wars in that century were quickly decided with fairly generous terms given the vanquished, because passions had *not* risen to the heat that demands retribution in a blood bath. Absolute war in its literal sense, where extermination is the aim, has rarely if ever been experienced in history. Unarmed groups could kill each other off to the last man if they so chose. *Men* determine the degree of totality in war.

In fact, there is no historical instance of total extermination of the population of a state. It has not been uncommon for single cities to be wiped out, as with Troy, Tyre, Carthage, and Magdeburg, but never has the whole people of a country been obliterated. Cities such as Carthage may symbolize the power of a state, and their extinction may end a dynasty. But the underlying social structure, the roots of its civilization, is by

no means wiped out. It will manifest itself again in some other form of government.

The example in history which comes nearest to the absolute obliteration of a state population happened in fairly recent times. The furious Paraguayan war between 1864 and 1870 came close to blotting out its population.

It all happened over a border dispute, but inept diplomacy left Paraguay defending herself against a powerful coalition made up of Brazil, Argentina, and Uruguay. The little Paraguayan state of 1,337,439 souls fought with an unheard of tenacity against her huge neighbors. Every able-bodied person was thrown into the struggle, including battalions of women and boys. Defeat found the Paraguayan population reduced to less than a quarter-million, of whom but 28,746 were men.

Strangely, Paraguay survived as a state. Argentine-Brazilian rivalry enabled Paraguay to retain her national identity, and today it prospers, although the population has not yet risen to its 1864 level.

Punishment of a nation has in the past been a drawn-out process. It has been estimated that in World War I, in addition to the 8 million uniformed personnel killed, there were over 13 million civilians who died from war causes. A total of 21 million. Some estimates of all deaths caused by this war run as high as 40 million. This was all done, one must remember, without the use of atomic bombs, and when air power was in its insignificant infancy. Four years of attrition through surface combat and blockade took this gigantic toll.

Casualties were not appreciably greater in World War II—a war which lasted one year longer than the other and actively involved far more of the world's population. The Second War amounted to two wars: one in Europe and one in Asia. A study made by the Research Studies Institute of the

Air University estimated 9.5 million as the total uniformed killed of all nations. Overall, civilian and military, estimates run about 24.5 million killed—a figure comparable to the most conservative World War I estimate of 21 million. And in the Second War, fire-power had made a jump step, a quantum jump, if you will, to include strategic bombardment.

It makes no historical sense, therefore, to conclude that increased fire-power is responsible for increased casualties. The 305,000 civilians killed in Germany by bombing do not approach the 7,000,000 Germans (largely civilians) lost in the Thirty Years War. Although many factors combine to increase the intensity of war, the emotions of the people engaged as represented by the will to continue warfare, will in large measure determine the number of casualties. Regarding atomic weapons as evil instruments, therefore, and pleading for their unilateral ban are as short-sighted as it would be to condemn a policeman's pistol for the murders of a gunman.

Use of atomic weapons will undoubtedly cause great punishment in a very short time. If the temper of the people determines when a nation sues for peace, absolute war of the future should end in a few days, with no greater casualties than in past major wars.

Such a war could conceivably be terminated with minor destruction if combined with a psychological offensive to hasten capitulation. In any case, there is little evidence from the history of war upon which to predict a Pyrrhic victory, for although the scope of destruction has been expanded terrifically, the time span of war will be compressed proportionately. A people can take just so much. The evidence of history points to no characteristic in mankind that will lead him, as a race, to suicide.

I believe the pattern of future war is clear. It is high time we face it and stop wringing our hands. If we face it, then we can win it. When the world knows we have both the will and the capacity to win, there will be no war, large or small.

War itself is to be avoided. Free nations gain nothing by conquest; still they must defend themselves by all means at hand as long as materialistic forces in the world go unchecked. Although a victorious war is cruel and costly, it is inconceivably less cruel and less costly than a defeat. Patrick Henry's words might be worth reviewing here: "Is life so dear or peace so sweet that it must be purchased at the price of chains and slavery?" This is the choice we must make.

III

SOVIET ATTITUDES TOWARD MODERN AIR POWER*

By RAYMOND L. GARTHOFF†

The revolution in the technology of war

*This paper represents the preliminary conclusions of a study of Soviet air force doctrine and strategy now in progress.

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that has taken place during the past decade has provided air power with vastly increased capabilities. The day of supersonic jet propulsion, of radar, of unmanned aircraft and guided missiles has arrived. Finally, modern air power not only has acquired intercontinental striking range, but it has been endowed with a different magnitude of effectiveness

by virtue of the development of nuclear and thermonuclear weapons. These developments, of course, affect not only Soviet attitudes toward the role of air power but our own views as well. However, there are significant differences in the ways in which the United States and the Soviet Union react to these developments. To understand these differences we must look to other factors.

The strategic position of the Soviet Union changed profoundly as a result of World War II. The elimination of the German and Japanese military power and the accretion to the Soviet bloc of the resources of Eastern Europe and China, marked significant improvements in the Soviet position. The dominating change, however, has been in the location of the new major source of opposing power across the seas, in North America. The United States is clearly unsailable by the weapons which the Soviets employed in the Second World War. The strategic requirements to annihilate, or at least to neutralize, a power beyond the reach of Soviet infantry, tanks, and tactical aviation is completely unprecedented in Soviet experience. Unlike ourselves, the Soviets have never engaged in war thousands of miles from their home base, across the seas. And in the nuclear age the need is absolute. This fact, perhaps as much as the initial American monopoly (and subsequent superiority) in atomic weapons has served as the chief deterrent to Soviet expansion by force.

Air power, in the Soviet view (and not unlike our own), has three primary missions: (1) tactical offense and defense in support of the ground forces, (2) strategic defense of the homeland, and (3) strategic offense against the enemy. I have listed these three missions in the order in which a Soviet air force officer would probably name them; I should not be surprised if the order were precisely reversed if an American air force officer were asked to list these missions.

Soviet attitudes on the role of air power—which, when they are formalized, we refer to as doctrine—may be inferred from several types of data. One indicator (which, incidentally, was recently emphasized by a Soviet air force general) is the organizational structure of the air force. There has never been an independent Soviet air force establishment corresponding to the USAF. The organization of Soviet air power conforms to a considerable degree to its functional missions. In fact, there exist Soviet air forces, each primarily responsible for a particular mission. By far the largest and most diverse in objectives and composition is the aptly named Air Force of the Soviet Army (VVS-SA). It comprises some two-thirds of Soviet aircraft strength, and its mission is to gain air superiority, carry out reconnaissance, effect tactical interdiction, and provide close support to the ground forces. Although it has an independent channel of command below the level of the Front (as the Soviets term their Army Group), the Front commander, almost invariably an infantry general or marshal, determines the employment of the "air army" which forms part of his command. On the national level, the Commander-in-Chief of the Air Force of the Soviet Army is the senior air force officer and a Deputy Minister of Defense.

The most important of the other air forces is the independent long-range bombing force (ADD). Save for one brief period, it has been autonomous since 1942. The record of this force in world War II did not justify calling it a strategic bombing command. Since the war, development of a modern strategic striking force has had high priority.

Next among the Soviet air forces we should note the fighter interceptor force. The Soviets have long maintained an autonomous Air Defense Organization (PVO) quite similar to the newly constituted U.S. Continental Air Defense Command. Designed for

integrated air defense of the U.S.S.R. itself, it comprises detection and warning, and anti-aircraft artillery and missiles, in addition to the fighter interceptor component.

The Soviet Navy has its own air force (the VVS-VMF), which is primarily a defensive arm for protection of the fleet, fleet bases, and sea frontiers, but also includes offense and reconnaissance in cooperation with naval or coastal operations. The Soviet Navy has no aircraft carriers; hence all air units are land-based.

In addition, there is a Soviet Airborne Forces Command (VDV), independent of either infantry or army air force, with its own air transport component. There is also a small air force maintained by the MVD internal security troops, and finally the Soviet Civil Air Fleet (GVF), which even in peacetime is under the supervision of the Ministry of Defense.

What does this organizational division tell us about Soviet views on the role of air power? First, that the major part of Soviet military aviation is assigned to the tactical mission and subordinated at high level to the ground forces. Second, that there is an independent strategic air command directly under the top leadership. Third, that the air forces as a whole—and, incidentally, the Navy—are part of a unified ministry largely dominated by ground force marshals.

Traditional Soviet military doctrine was developed in the context of massive continental land wars.¹ Consequently, the dominant Soviet view of the role of air power has been that it is a significant *supporting* arm to the ground forces, in a combined-arms team built around the infantry on the field of battle. Strategic bombing as we know it was virtually absent from soviet doctrine and experience in World War II. On the other hand, it is perhaps relevant to recall today that it was not always so. In the 1930's there

was wide discussion by Soviet air force leaders of the theories of Douhet, and from about 1933 to 1937 particular attention was given to heavy bombers capable of "independent missions of strategic significance." However, coincidentally or otherwise, most of the adherents of this view fell in the Great Purge of 1937-1938.

One basic tenet of Soviet military doctrine, adopted in the 1930's and dogmatized in World War II, required that air power be integrated into a mutually supporting ground-air force combined-arms team. Another basic doctrinal tenet, complementing the first, was the emphatic rejection of reliance upon any single weapon or strategy as capable of gaining victory. These tenets have become ingrained Soviet military traditions and have ideological overtones. Moreover, the Soviets feel that the success of the Red Army in World War II was due in substantial degree to adherence to these principles. The Soviets today continue to voice these views. They strongly criticize alleged American over-reliance upon air power, atomic and hydrogen bombs, and "push-button warfare." Significantly, Soviet actions support these words: The Soviet Union maintains a massive standing ground army and, as we have seen, devoted two-thirds of Soviet air strength to tactical aviation assigned to support these ground forces. This fact underlines the relevancy of the written expressions of Soviet doctrine.

But what of the postwar technological and geostrategic challenges to the Soviet Union? Paradoxically, although it was World War II which gave birth to both of these unsettling developments and, in the West, provided impetus for a re-evaluation of the role and potentialities of air power, in the Soviet Union the war served to *retard* development of air doctrine because of the virtual canonization of "Stalinist" military doctrine of 1945. Excessive atten-

¹Cf. Garthoff *Soviet Military Doctrine*, *passim*.

tion to, and idealization of, Soviet wartime operations (which were based on the concept of air support of ground forces) have, I believe, inhibited constructive criticism and innovation. The period from the end of the war (especially after 1947) until 1953 was thus dominated by the conservative dogmatization of World War II doctrine on air power. For a little over a year now, there have been increasing signs of a recognition by the Soviet leadership of the significance of new weapons and of the world strategic picture.

There were, it is true, a few interesting discussions by Soviet officers—in the air force as well as in the other services—in the period 1945-1947. They reveal that some officers clearly saw the need for an increased role for strategic air power. The absence of written discussions in the years following probably does not mean that there was no thought about the implications of new weapons, but expression of such thought was considerably stifled in the period from 1947 to 1953. Nonetheless, the main lines of the Soviet development of attitudes are clear. Generally speaking, the Soviets have attempted to integrate a newly emphasized strategic aviation mission into the established doctrine as a complementary arm. One interesting characteristic of this attempt to reconcile the facts of air power in 1955 with the ideas of 1945 is the retroactive contention that strategic bombing played a significant role in Soviet operations in World War II: If the history of the war is a record of superior Soviet military science, and if superior military science now obviously includes some provision for strategic air operations, then "history" must be rewritten! Such projection of politics into the past has characterized Soviet historiography pervasively and its extension to military history is therefore consistent. One Soviet general, writing in 1950, was even so bold as to imply that the Soviets had conducted strategic bombing on a larger scale than had the

United States! Nonetheless, in the same article the author rejects what he terms "the pseudo-scientific theory that a war can be won by bombing alone" which he ascribes to the United States.² Conservative caution persists. Even in the fourth year of the atomic era a Soviet air force colonel could write in a General Staff publication that "No independent operations of aviation can play such a role as operations conducted in the interests of the ground forces."³

While Soviet views on the role of modern air power have developed slowly, considerable progress has been made in developing an advanced capability. Even during World War II, and despite the bias of the prevalent Soviet view, Stalin sought to lay the foundation for a long-range strategic striking force. General Arnold has stated that at Tehran, in 1943, Stalin "asked innumerable and very intelligent questions . . . about our long-range bombers," although "he was just beginning to learn something about strategic bombing."⁴ This reflects an attitude of placing the weapon ahead of the doctrine, a characteristic of much of the subsequent Soviet development. It was chance that caused several US B-29A aircraft to crash-land in Siberia in 1944, giving to the Soviets an unexpected major gain in their efforts to construct a modern four-engine bomber.⁵ The Soviets unveiled the Tu-4, Tupolev's copy of the B-29, in August, 1947, less than three years after acquiring the American bombers.

A former Soviet air force officer who defected to the West reports that Stalin gave increased attention to strategic bombing only after he had been to Potsdam, in 1945, and had personally observed the destruction in

²Col. General S. Rudenko in *Krasnaia Zvezda*, February 10, 1950.

³Colonel A. Volkov in *Voennaiia Mysl'*, (April, 1949), p. 40.

⁴General H. H. Arnold, *Global Mission* (New York: Harper & Brothers, 1949), p. 469.

⁵Despite many requests, the United States had refused Lend-Lease, and had provided only a single B-24.

Berlin caused by the air power of the Western Allies.⁶ Another former Soviet air force officer, Lt. Colonel Tokaev, reports that the long-range bomber force was being given special attention by the Politburo at the time of his defection, in 1948.⁷ The Soviet interest in strategic air power, and the primitive level of appropriate doctrine, are both in evidence in the fact that a "campaign" for the best aviation manual for long-range operations was announced in *Red Star* late in 1947.⁸ Another indication of Soviet interest in strategic air power is the translation into Russian of at least one volume of the *U. S. Strategic Bombing Survey*.

I mentioned earlier that, for a little over a year now, there have been indications of a new, or at least newly expressed, appreciation by the post-Stalin Soviet leadership of the significance of new weapons and of the world strategic picture. Almost exactly a year ago, in response to President Eisenhower's "atoms for peace" speech before the United Nations, the Soviet government stated: "Nor should it be forgotten that there exist modern types of armaments such as rocket weapons which contemporary technology enables to be employed at ranges of thousands of kilometers, without aircraft, and also torpedoes with atomic warheads, etc."⁹ Several other statements, including one signed anonymously by "A General in Retirement," similarly stressed the emergence of weapons for intercontinental warfare.¹⁰ A prototype heavy jet bomber and a flight of jet medium bombers were publicly unveiled in the air parade on May Day of this year. The Soviets are demonstrating their preparation for a possible strategic atomic duel.

⁶An anonymous "Former Russian Staff Officer" writing in the *Manchester Guardian*, June 23, 1950.

⁷Cited by Asher Lee, *The Soviet Air Force* (New York: Harper & Brothers, 1950), p. 177.

⁸*Krasnaia Zvezda*, September 26, 1947.

⁹*Pravda* and *Izvestiia*, December 22, 1953.

¹⁰Cf. "A General in Retirement," *Izvestiia*, January 19, 1954.

The Soviet strategic concept is being modified to accord with Russia's new strategic requirements and technological opportunities. The Soviets are seeking to effect this change within the basic framework of doctrine as it has developed in the past. Thus the new arms—most notably long-range aviation—have complemented, rather than replaced, the ground theater combined-arms team.

Soviet doctrine of a decade ago assigned but a limited role to long-range air (and sea) weapons. The Soviet armed forces lacked the diversified weapons system of the West. As a consequence, the Soviets have had much less experience in the employment of strategic air weapons and in their research and development. Still more important, they have also had less opportunity to develop an understanding of the potential role of such weapons in a war fought in other than a continental theater.

This is the meaning of the Soviet adherence to the doctrines of non-reliance upon any single weapon, of maintenance of the tactical combined-arms team, and of the integration of strategic bombing into a broadened concept of the combined-arms team. It is essential that we appreciate the significance of the Soviet "new look" in strategic bombing and the concomitant development of long-range bombers; to do so we must understand the importance and meaning of conceptual differences between the Soviet Union and the United States.

The present Soviet view on the role of air power tends to approximate the United States' concept of a decade ago much more nearly than it does our present concept. In a word, the Soviet doctrine has raised the role of strategic air power from the status of a "sideshow" in war to that of an integral component of the main show. In this same span of time, the United States has gone far toward converting strategic air power into the main reliance of national policy.

REVOLUTIONARY WEST POINT: "THE KEY TO THE CONTINENT"¹

BY GERALD C. STOWE AND JAC WELLER*

THE SIGNIFICANCE OF THE HIGHLANDS

West Point was the center of "the almost infinitely important posts in the Highlands"² of the Hudson during the Revolution. These defensive positions were the base on which Washington pivoted his entire strategy from the fall of 1776 until the end of the war seven years later. It was by far the most important American fortification during the war, as well as the main armory and ordnance depot of the new country in the peace that followed. Our entire standing army of less than 700 was stationed there on 3 January 1784.³

West Point continued to be of importance as a fortification well into the 19th century.

* (Editorial Note: The authors of this study base their observations not merely on an analysis and reinterpretation of secondary and a few primary sources and old maps, but also, and perhaps more importantly, on exhaustive personal tactical reconnaissance of the entire Highlands area. Gerald C. Stowe is a veteran of WWII whose great interest in weapons brought him to the West Point Museum of which he has been the curator for several years. Readers will recall Jac Weller as the Author of "The Logistics of Nathan Bedford Forrest," in *Military Affairs*, XVII, 4 (Winter, 1953). In addition to the works specifically cited in the footnotes, the following best known secondary sources proved the most useful in the preparation of the article:

Douglas Southall Freeman, *George Washington*, 5 vol. completed (New York, 1948-1952), hereafter cited as Freeman; Christopher Ward, *The War of the Revolution* (New York, 1952), hereafter, Ward; George O. Trevelyan, *The American Revolution*, 4 vol. (London, 1909-1914); William W. Fortescue *A History of the British Army*, 20 vol. (London, 1911-1935), hereafter, Fortescue; Benson J. Lossing, *The Pictorial Field-Book of the Revolution*, 2 vol. (New York, 1855), hereafter, Lossing; Charles Stedman, *The History of the American War*, 2 vol. (London, 1794), hereafter, Stedman.

The United States Military Academy, which started a continuous existence in 1802, has, by virtue of its location there, added greatly to the popular appreciation of the name.⁴ This monograph is devoted to the defenses of the Highlands, centering finally at West Point, during the period from 1775 to 1783, and particular attention is given to Washington's strategic use of this bastion.

The strategic importance of the position stemmed from its situation. The Colonies were naturally divided by a line which ran from British Canada south through Lake Champlain and its tributaries, and down the Hudson to British New York. Because of Britain's Navy, and her well-disciplined in-

¹Washington Irving, *Life of George Washington*, 5 vol. (New York, 1855-1859) vol. III, p. 497; also General Huntington as quoted by Boynton, p. 178, with slight change.

²Knox to his brother, 7 May 1779, in Francis S. Drake, *Life and Correspondence of Henry Knox*. (Boston, 1873) p. 61; hereafter, Drake.

³Noah Brooks, *A Soldier of the Revolution* (New York, 1900) p. 186; hereafter, Brooks.

⁴The earliest recorded ideas for a military academy were embodied in Knox's "Hints for the Improvement of the Artillery" submitted to a committee of the Continental Congress 27 September 1776; similar plans were proposed from time to time by others, particularly Washington and Hamilton: Elward C. Boynton, *History of West Point* (New York, 1871) p. 177; hereafter, Boynton. Knox also established a military or artillery academy of sorts at his headquarters at Pluckemin in the winter and spring of 1779: *Philadelphia Packet*, 6 March 1779 as quoted by Brooks, p. 118. The rank of cadet was created in 1794 and classes of a sort conducted at West Point during 1796: Sidney Forman, *West Point: A History of the United States Military Academy* (New York, 1950) pp. 14-15; hereafter, Forman.

fantry, superbly effective in formal open battles, this entire line was extremely vulnerable to capture. It could be defended effectively only in the rugged mountains where the Hudson flows in almost a gorge. Below these Highlands, the British Navy was supreme; once through this barrier, small ships of war could interrupt all save desultory communications to well above Albany. On two occasions during the Revolution, the British came extremely close to achieving complete control of this whole line. They would have cut the Colonies in two and probably, at least temporarily, defeated the independence movement in America.

Continental communications are so good today that we seldom think of them at all. Boston is six hours from San Francisco by air. Only three days are required for the trip by rail; a private citizen in his passenger automobile can do it in a week easily regardless of weather and season. The different sections of the country are now united into a homogeneous whole by superb communications. During the Revolution, an express message took days to go from Georgia to Massachusetts; an ordinary traveler would take weeks to go the same distance over land. After the sea lanes were closed by the British Navy, goods and materials just didn't move at all over such long distances although, throughout the Revolution, important supplies continued to move across the Hudson in both directions. The economy of the new country was to a considerable extent dependent upon this exchange.

Men were the most precious freight carried across the Hudson. Washington had the advantage of interior lines of land communications so long as he held the Highlands; they were slow, but they were as reliable as those of the enemy which were dependent upon sailing vessels. Massachusetts furnished more than twice as many troops

to the Continental Army than any other state; Connecticut was second.⁵ After 1776, few of these troops fought actively in New England, save in the relatively small actions around Newport in Rhode Island. Washington's communications system, poor at best because of 18th century roads, would have practically ceased between New England and the South if the British had been able to take and hold the Highlands. The mere physical interruption of the free flow of information, troops, and supplies perhaps would have been fatal; in addition there was another source of danger.

In 1775, there were two different groups of Colonies. It is hard to realize today the extreme division of interest between New England and the South. The latter term had, in the Revolution, a different meaning than its Civil War connotation. In the earlier conflict, it meant not only Virginia and her southerly neighbors but also Maryland, Delaware, Pennsylvania, and New Jersey. In fact, the Deep South was so far away that its people were not well known in New England. Not so Pennsylvanians and their neighbors; these were sometimes actively hated. Two definitely different ways of thought, action, and life extended along the seaboard on either side of the former Dutch colony of New York, through which the riparian line ran. Early in the Revolution it was sometimes necessary to encamp troops from these two sections of the Colonies in two separate areas with what amounted to a neutral strip between them.⁶ Sometimes their feelings for each other were slightly less bitter than those they had for the British. There was seldom a more obvious opportunity to divide and conquer.

⁵Henry B. Carrington, *Battles of the American Revolution* (New York, 1876) p. 653; hereafter, Carrington,

⁶Major General William Heath, *Memoirs* (New York, 1901) p. 80.

EARLY EFFORTS IN THE HIGHLANDS

The geographical and political situation of the Lake Champlain-Hudson River line was fully appreciated by both sides. The military leaders of Great Britain realized its importance before Burgoyne's effort to reach and maintain himself at Albany in 1777. Indeed, the original seizure of New York from the Dutch stemmed from the desire of the British to unite their two groups of Colonies. The importance of the Hudson River and Lake Champlain was appreciated during the entire period of the wars with France.⁷ That was why Ticonderoga was one of the three or four most powerful fortifications in the new world. The British were actively planning to seize and fortify the Highlands as early as the fall of 1775.⁸

Washington, as well as other Continental leaders, realized from the start of hostilities the great advantage to the maritime enemy given by the many navigable rivers of coastal America. Washington, as a member of the Continental Congress from Virginia, served with the Congressional Committee which drew up and proposed on 25 May 1775 the fortifications of the Highlands.⁹ But the first positive action was undertaken by the Provincial Congress of New York in a resolution for actual building, passed 18 August 1775; construction began 11 days later.¹⁰ In order to understand the fortifications and their significance, let's take a closer look at the entire terrain of the lower Hudson Valley.

In Revolutionary times, the river was navigable for heavy shipping as far as Albany, about 160 miles. The river is tidal throughout most of this stretch; the water is brackish

in the Highlands most of the year. The river runs roughly north and south; for 50 miles from its mouth, any river-closing fortifications erected by the Continentals could be taken from the rear easily, or out flanked. At this point, however, a mountain range about twelve miles wide, running roughly northeast and southwest, intersects the river. The range extends too far in either direction for strategic flanking by another line of communications. Even tactical flanking would be impossible against a vigilant commander with sufficient defensive troops. This range, which has several names, is anchored at either end in the Vermont-New Hampshire and the Pennsylvania-New Jersey mountains. "The Highlands" means in this specific case only the mountainous country close to the Hudson River.

On the west side of the Hudson, there are three principal mountains with rugged country between. These are Dunderburg on the south, Bear Mountain in the middle, and Storm King on the north, to give them their present names. On the east of the Hudson, the mountains are not quite so well defined, although rugged country extends from around Peekskill north to Breakneck Ridge which is a continuation of Storm King on the east side of the Hudson. Anthony's Nose, opposite Bear Mountain in the middle Highlands, was of extreme military importance. In the river, there are a series of points and bends of various types as well as rocky islands; navigation was reasonably difficult, although there was sufficient water so that the largest ships then able to get into New York Harbor could sail well past the Highlands.

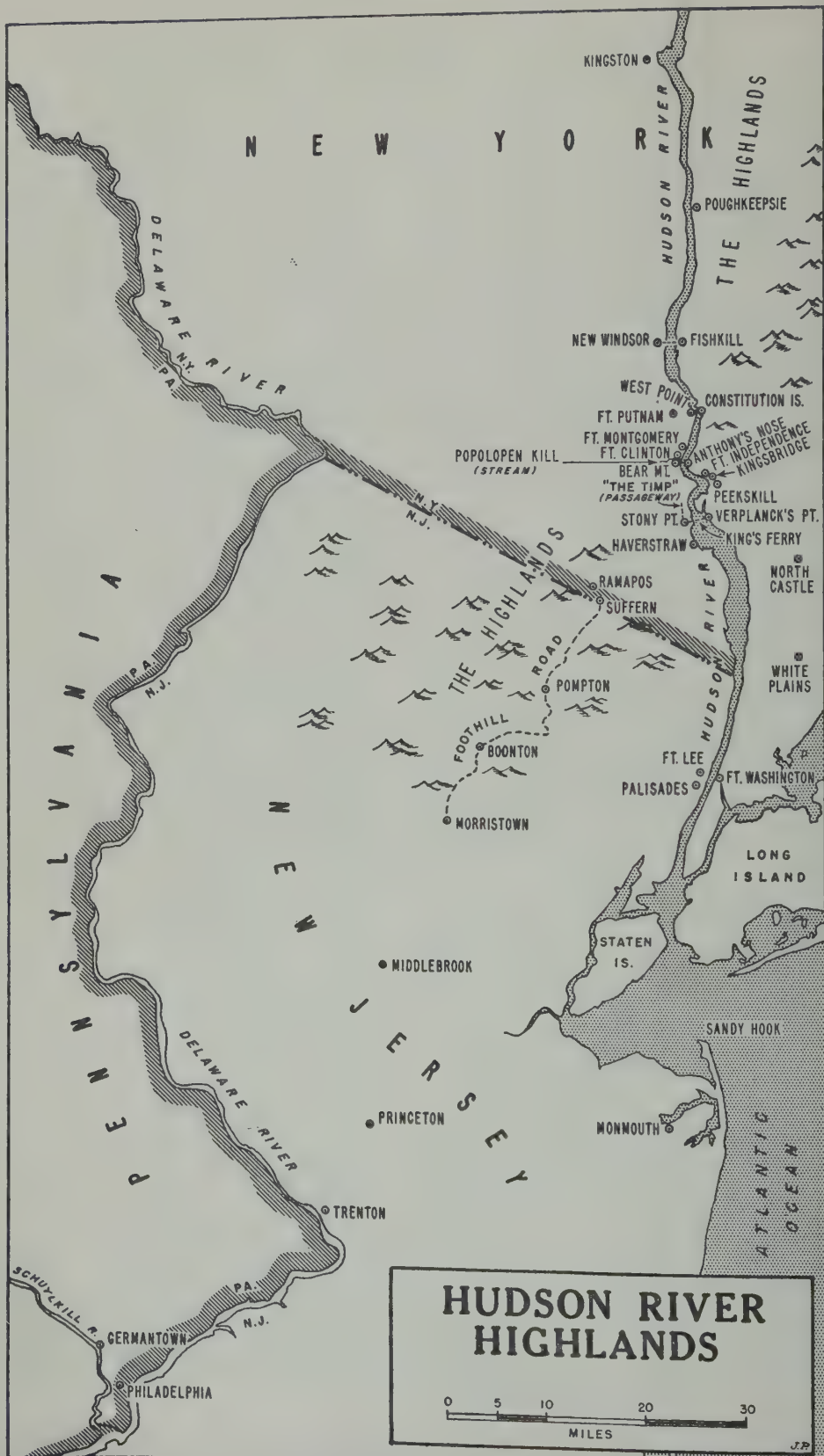
Stony Point juts out into the river at the southern edge of the west side of the Highlands. Verplanck's Point is on the east side. The little town of Peekskill is slightly above and to the east of Verplanck's Point. On the west side of the Hudson just above Bear

⁷Freeman, vol. II, p. 24.

⁸Peter Force, editor, *American Archives* (Washington, 1837-1853) Ser. 4, vol. III, p. 927; hereafter, Force.

⁹*Journals of the Continental Congress, 1774-1789* (Washington, 1904-1922) vol. II, p. 60; also Boynton, p. 16.

¹⁰Forman, pp. 7-8; he cites several original references in this sequence of events.



Map by Jacob Panian, Cartographer, Washington, D. C.

Mountain, Popolopen Kill makes a deep gash in the Highlands and runs into the Hudson through a steep ravine. There are two excellent points for defense on either side of this stream. Across the river is Anthony's Nose.

About four miles above Popolopen Kill, the Hudson takes a ninety degree bend to the west around a high mass of rock. This is West Point. Across the river from the Point is Constitution Island, again using the modern name. Both are eminently suited for fortification. Above West Point, the river bends back north and runs between Storm King and Breakneck Ridge.

At the northern end of the Highlands, there begins a stretch of 90 miles of rolling country extending past Albany. Close to the east bank of the river and just to the north of the mountains there is a small rocky island now known as Polopel's or Bannerman's Island. Here the river is wide, but relatively shallow. Across from the island, and on the western shore, stood the village of New Windsor. Slightly higher up on the eastern shore was Fishkill.

Transportation across the river in the 18th century was, of course, entirely by boat. In reading old accounts of life on the river one is impressed with the maritime skills of New York State people; they seemed to use a boat in place of a wagon, or coach, wherever possible. Early in the Revolution frigates were built at Poughkeepsie, 20 miles further up the river on the eastern shore.¹¹

Probably the most used crossing of the Hudson above New York City during the Revolution was at King's Ferry which ran from Verplanck's Point to Stony Point at the southern end of the Highlands. This Ferry joined a main road from Massachusetts and Connecticut to one extending to New

Jersey and Pennsylvania. Interruption of the ferry crossing would do little harm so long as the Highlands were held, as there were at least two more well defined crossing places: one just below West Point, and the other above Storm King and Breakneck Ridge from Fishkill to New Windsor.

FIRST SYSTEM OF HIGHLAND FORTIFICATIONS

During the period from 29 August 1775 to 7 October 1777, a group of forts, batteries, and camps as well as river obstructions took shape. These cost more than \$250,000, a very large sum for those days, as well as tremendous physical labor from Continental troops and militia.¹² There was confusion, bickering, improper engineering advice, and various other troubles. However, these first works eventually emerged, considering the shortages of everything, especially of "know how" and brains, as quite a fair defensive system.

Without regard to the chronology of its construction, and going up the river in the direction that the enemy would take advancing from New York City, the first fortification was at Verplanck's Point on the east side of the river. This was an inconsiderable work mounting, apparently, only two guns.¹³ About three and a half miles farther north, at "Continental Village" on the old Albany Post Road, was the customary station of the largest Continental force in the Highlands. The early American commanders in the Highlands had their headquarters in or about Peekskill. Above Peekskill Bay, and on the east side of the river, was Fort Independence.

¹²Boynton, p. 47. This is the usual figure given, but seems too low. According to the same authority, iron for the chain and boom cost \$440 per ton; since more than 100 tons were required, the entire expenditure would have been used for this alone. Albert H. Heusser, *The Forgotten General: Robert Erskine* (Paterson, New Jersey, 1928) p. 141, estimates that the Fort Montgomery, or first chain, alone cost £70,000, or about \$350,000; hereafter, Heusser.

¹³Hoffman Nickerson, *The Turning Point of the Revolution*, (New York, 1925) p. 342; one was lost and the other saved; hereafter, Nickerson.

¹¹William H. Carr and Richard J. Koke, *Twin Forts of the Popolopen, Bear Mountain* (New York, 1937) p. 20; hereafter, Carr and Koke.

This work was situated on a small promontory below Anthony's Nose which put it completely at the mercy of an enemy who controlled the river.¹⁴

Two miles farther north, where the majestic summit of Anthony's Nose—the present eastern terminus of Bear Mountain Bridge—rises almost sheer from the river to a height of almost 900 feet, the Americans had their principal fortifications and obstructions. There were inconsiderable works on the face of Anthony's Nose, probably of the nature of rifle pits. Across the river, where Popolopen Creek or Kill enters the Hudson at right angles through a full sized chasm, there were forts on the high ground, to the north, Fort Montgomery, and to the south, Fort Clinton. These two forts were connected by short stretches of road and a bridge across the Popolopen, probably of a floating type.

The Hudson was obstructed here by a chain, a boom of logs, and one or more rope hawsers stretched from Fort Montgomery to Anthony's Nose. These effectively closed the river so long as the 60 guns in the two forts prevented the British from working on the obstructions.

Above the twin forts of the Popolopen, there was little save the badly planned and costly fortifications of Constitution Island across from West Point. The Point was not at that time occupied, although the original plans proposed in the Continental Congress seem to have included the fortifications of the site.

At the northern end of the Highlands level with Polopel's Island was a line of marine chevaux-de-frise—iron pointed tree trunks sunk below the surface of the river

set in cribs of timber and stone.¹⁵ There was originally a battery on the west bank controlling this line of submerged obstructions.

THE CAMPAIGNS OF 1776 AND 1777

It will be recalled that the Continental Army under Washington drove the British from Boston early in 1776. The British retreated to Halifax and then, in accordance with Washington's expectations, returned to Staten Island with the obvious intention of trying to wrest Long Island and Manhattan Island from the Americans. During the early summer, both the British and American armies were concentrated around New York. The Hudson was closed by American batteries on lower Manhattan and by Forts Washington and Lee, with a line of chevaux-de-frise 12 miles farther north. The lower batteries proved worthless; Knox lost more men by his old guns bursting than were hurt aboard the British ships that ran the gauntlet on 12 July 1776.¹⁶ The upper forts and chevaux-de-frise were passed on 14 September 1776 without serious loss. The line of chevaux-de-frise inspired respect, but the submerged iron-pointed stakes were not thick enough to stop vessels proceeding cautiously.¹⁷

The early battles went badly for Washington and the Continental army; both were destined to profit by experience. First, they lost Long Island, and then Manhattan Island save for Fort Washington, which remained but was isolated. Sir William Howe, a skillful commander, won again in a series of maneuvers which caused Washington's re-

¹⁴Fort Independence has sometimes been differently located; this is based on Captain Thomas Machin's Map of 1778 now in the Cornell University Library. This map shows, however, several variations from usually accepted works including a "third" boom or chain and fortification not mentioned elsewhere.

¹⁵Heusser, pp. 116-20, gives a well documented account of Erskine's original idea of this marine chevaux-de-frise; however, the originally proposed "tetrahedrons" were probably too complicated. Those used in Polopel's Island were certainly of the simpler crib-anchored type. The point of one is preserved in the Newburgh Museum.

¹⁶Knox to Mrs. Knox, 13 July 1776, as quoted by Drake, p. 28.

¹⁷Henry P. Johnson, *The Campaign of 1776 Around New York and Brooklyn* (Brooklyn, 1878) pp. 99-100.

tirement to White Plains. A battle was fought and, after an interval, the Continental army retreated to North Castle, which is almost three-quarters of the distance from New York City to the Highlands. The British considered the American position here to be unassailable.

Thus far, Washington had been fighting and maneuvering to the east of the Hudson; New England had been more or less the base of his operations. The retreating Continental army, however had moved north rather than east. They had retreated towards the Highlands. So long as Washington remained at North Castle, the whole line of communications from the Highlands east to New England was secure.

When the British army failed to attack at North Castle and moved back south early in November, 1776, there were other considerations. The Continental army, probably because of political pressure, still held Fort Washington on upper Manhattan Island; Fort Lee on top of the Palisades on the Jersey side was also strongly held. New Jersey and Philadelphia were, of course, vulnerable now that the British were firmly established in and around New York. Washington left General Charles Lee in command of a strong Continental force at North Castle and crossed the Hudson into New Jersey with about half his army. This move was necessary both to support the two garrisons and to oppose British occupation of New Jersey and eastern Pennsylvania. It was also the beginning of the great importance of the western line of communications with the Highlands.

The isolation of Fort Washington and the exposed position of Fort Lee were fundamental weaknesses. Washington and the Continental army, although in New Jersey, could not really support either. The British capitalized on these conditions. Fort Washington fell by assault on 16 November 1776.

Fort Lee was hastily abandoned to the enemy on 20 November 1776. Washington and his shrinking army were driven across New Jersey and into Pennsylvania. Nevertheless, he held fast to the Highlands. General Heath was in command at Peekskill with about 3,000 men, which was almost as many men as Washington retained under his own command.¹⁸

General Charles Lee (no relation to Confederate General Robert E. Lee) with culpable intentions, treated his command on the east side of the Hudson as independent of Washington's orders. He delayed for days complying with positive instructions to cross the Hudson with his force and reinforce the commander-in-chief in Pennsylvania. When he finally started he proceeded so slowly that he was captured at Basking Ridge in New Jersey; Sullivan, his second in command, quickly completed the rest of the march to join Washington.

Washington fought the tremendously important actions of Trenton and Princeton partly in order to restore the western lines to the Highlands. As will be explained later, the geography of the region made these lines far stronger now that Forts Washington and Lee were gone. At Morristown, early in January, 1777, he took up for the first time the ultimately victorious strategic line from Philadelphia to the Highlands. Washington took full advantage of his interior lines of communication. Morristown itself was shielded by a respectable small range of mountains making the field fortifications at Middlebrook extremely formidable and behind these he was able to move freely.

The British grand strategy of Burgoyne's attack from Canada was well known. Carlton had opposed Arnold in the Lake Champlain region in the summer and fall of '76. Washington was prepared to oppose strength to strength. Although he was not entirely

¹⁸Force, vol. III, p. 543.

responsible for the American dispositions, as the Continental Congress continued to meddle in command affairs, the general counter strategy was his, nevertheless.

A strong northern Continental force under Schuyler, and later Gates, was centered on the upper Hudson. Old, brave, and illiterate Israel Putnam was now in command of the Highlands. During the entire spring, Washington held his forces in positions between Philadelphia and the Highlands, with his main concentration at Middlebrook and Morristown. The attack from Canada was begun early. Washington anticipated that Howe would go up the river for a junction with Burgoyne at Albany, as this was obviously the sound move for the British commander to make.¹⁹ Instead, Howe feinted overland through New Jersey towards Philadelphia. Washington had his army well in hand behind the Middlebrook fortifications. The British could not march off southwest and leave him on their flank and rear, and they were unwilling to attack the Continental army in its field defenses. Howe therefore pulled back to his ships. Washington anticipated the logical advance up the Hudson. Although the Highlands were already powerfully held, with supports at Pompton, more reinforcements were sent north. A large part of the infantry at Middlebrook was in motion along the valley and foothills roads, to be described later.

The British fleet, however, moved south, leaving only a garrison force in New York City. This move was inexplicable to Washington; but he had to oppose strength with strength. So he took his army across the Delaware to defend Philadelphia as soon as he was positive that Howe was committed to

an attack on the seat of the Continental Congress. If Howe had attacked the Highlands in full force, Washington would, of course, have been there. Such a hypothetical move would have changed the war considerably.²⁰

In the move to Philadelphia, Washington concentrated the army under his personal command—the Southern Army—at the lower end of the Highlands-Philadelphia line. As the Northern Continental army was above Albany, Howe had successfully spread the American defense,²¹ won the battle of Brandywine and taken Philadelphia. Washington weakened the army defending the Highlands in order to get sorely needed reinforcements. Some withdrawals had already been made from the forces in the Highlands to strengthen the Northern army. In the words of another age, this was a calculated risk. Washington shrewdly figured that, at this time at least, decisive actions in the Highlands were unlikely. Sir Henry Clinton, the British commander in New York City, had neither the force nor the temperament to attack in strength. The fate of the new nation was at stake at Philadelphia and high up the Hudson. The fresh reinforcements enabled Washington to fight the tremendously important, drawn battle of Germantown.²² Morgan's riflemen, in the Highlands during the summer, were sent north and helped immeasurably towards Burgoyne's defeat.

Both sides were straining for victory above Albany and at Philadelphia. Sir Henry Clinton in New York City had only about 4,500

²⁰In the opinion of the authors, an attack up the Hudson by Howe would have been of most doubtful success. Washington with his whole force would have been in the Highlands.

²¹If the whole Continental Army had been united on the upper Hudson, Washington would have been in command personally. In preventing this, Howe could conceivably have considerably extended the war in point of time, since he and his army might otherwise have shared Burgoyne's fate.

²²The use of "drawn" may be open to question; even the immediate results were favorable to the Continental cause: Freeman, vol. IV, pp. 516-19.

¹⁹It is emphasized, however, that the decision was Howe's to make. His orders from Britain, although delayed, were advisory only, and not mandatory; see Fortescue, vol. 3, pp. 209-10. Sir Henry Clinton in his manuscript notes on Stedman (Nickerson, p. 339) certainly had no doubts that Howe should have gone; perhaps this was wisdom after the event.

men; Putnam at the Highlands had even less. However, on or about this date, the British commander received about 3,000 men direct from England. With skill and dexterity, he moved up the Hudson. This attack was not intended to be more than a diversion. Clinton had neither the force nor the intention of cutting his way through to relieve Burgoyne, and he didn't even know of the British Northern army's perilous situation.²³

In order to understand fully the fighting in the Highlands in early October, 1777, a knowledge of what went on elsewhere in the early months of the Revolution is important. We learned several things the hard way; so did the British. As already referred to, Knox found that batteries alone were useless where ranges were excessive. Probably about 600 yards would be the limit for positive closing of a channel by even the largest guns in daylight.²⁴ Accurate fire at night was next to impossible. Token installations, or installations with passages purposely left open, of chevaux-de-frise were not proof against the British Navy either in the Hudson between Forts Washington and Lee, or in the Delaware below Philadelphia.²⁵ Chains and booms of logs stretching continuously from bank to bank were rightly considered the only positive obstructions to a channel.²⁶

On the other hand, the glorious defense of Sullivan's Island against attack by the British fleet in Sir Henry Clinton's unsuccessful effort to take Charleston in 1776 taught the British not to attack our forts with ships alone. Forts Washington and Lee were taken from their land sides. Fort Mercer on the Delaware was evacuated in the face of a strong force of British and Hessians approaching overland. Fort Mifflin, on an island in the Delaware at the same point, was blasted into nothingness mainly by batteries of British naval guns landed on the Pennsylvania shore.

SIR HENRY CLINTON'S BREAKTHROUGH

Sir Henry Clinton arrived below Stony Point with 4,000 men on 5 October 1777. The American defenders in the Highlands numbered a total of only about 2,000, many of whom were militia. Major General Putnam, who had probably passed his period of greatest efficiency, was in general command with his headquarters at Peekskill on the east side of the river. A rather unusual condition existed on the west side. Brigadier General George Clinton who was also the governor of the State of New York was in a somewhat ambiguous general command. Though he was brave and capable he shifted from Governor to General and back again, probably without changing his hat. He was technically on leave of absence from the army at the state capitol at Esopus, or Kingston, but hastened down to the Highlands to assume command of the fortifications on the west side.²⁷

It will be recalled that there were two main fortifications on this side: Fort Clinton to the south of Popolopen Kill and Fort Montgomery to the north. Brigadier Gen-

²³Sir Henry Clinton to Burgoyne from Montgomery, 7 October 1777, as quoted in Carr and Koke, p. 42.

²⁴Even this is questionable; the old wooden fighting ships would absorb a great many solid shot without being totally destroyed. Lighter faster vessels moving with advantageous wind and tide were hard to hit. The whole is, of course, dependent also upon the size of guns as well as the skill of their crews. Other things being equal, the larger the gun the more accurate and destructive it was. On 1 June 1776, the largest guns in the Highlands were 15 9-pounders: Stirling-Putnam-Sargent report as quoted in Boynton, p. 28. In September 1780, there was one 24-pounder and 18 18-pounders: see reference No. 4 above. Knox's report of 24 August 1781 shows three 24-pounders and 20 18-pounders: Brooks, p. 142.

²⁵For lower Hudson obstructions, see reference No. 15 above; also Ward, p. 269. For Delaware below Philadelphia, see Archibald Robertson, *Diaries and Sketches in America*, (New York, 1930) p. 151.

²⁶These obstructions in the lengths required to close the Hudson were new; they were never attacked by ships during the war. What a frigate, or small ship-of-the-line, would have done to them with the wind and tide behind her remains in the realm of conjecture.

²⁷*Quarterly Journal of the New York State Historical Association*, April, 1931, p. 168.

eral James Clinton, the brother of the governor, was in command of Fort Montgomery. There was an abundance of people and places by the name of Clinton; towards the end of the Revolution, there was to be another and quite different Fort Clinton in the Highlands.²⁸

Sir Henry Clinton²⁹ the British commander, landed first on the east side of the river at Verplanck's Point and took a minor work there, convincing Putnam that the attack was to be on him at Peekskill. Putnam actually sent across the river to the two American Generals Clinton for reinforcements, weakening the forces on the west side.³⁰ The main British attack, however, was to be on the west side. On the morning of 6 October 1777 before dawn, an expeditionary force was landed at Stony Point and marched inland through extremely difficult terrain south of Dunderburg. There were points in the route over which they advanced where a determined corporal's guard could have held them up for hours,³¹ but they were completely unopposed.

This passage from Stony Point across the back of Dunderberg culminates in a position known locally as "The Timp." A part of this trail remains today very much as it was then; it's a tough climb for an active man unencumbered with 60 or 80 pounds of equipment. Even the British did not attempt to take artillery. Apparently, Washington was the only Continental commander who suggested that The Timp be garrisoned,³² yet neither of the American Clintons saw fit

²⁸Fort Arnold at the tip of the high land at West Point was renamed Fort Clinton after Arnold's treachery; the original Fort Clinton was not rebuilt after it was torn down by the British about 26 October 1777.

²⁹Probably a cousin of the New York Clinton's; Sir Henry was at one time in the New York Provincial Militia while his father was Royal Governor.

³⁰A total reduction of 260 men according to Henry B. Carrington, *Battles of the American Revolution* (New York, ca. 1876) p. 360.

³¹Charles Stedman, *History of the American War*, London, 1794, vol. I, pp. 400-01.

³²Nickerson, p. 347.

to even post scouts there.

After arriving at the hamlet of Doodletown, one half of the British force turned off to the right to attack Fort Clinton from the land side. The other half continued behind Bear Mountain and came down on the northern side of Popolopen Kill to attack Fort Montgomery. These two forces, beautifully coordinated as to time, brushed aside American forces sent out to impede their progress. They delivered their assaults with precision and bravery. They were both completely successful, although the American garrisons fought bravely and well, causing heavy losses to the assailants, and some of the defenders made good their escape.³³

Sir Henry Clinton had failed at Charleston against fortifications by attacking from the sea. He succeeded in the Highlands from the land. The chain stretched between Fort Montgomery and Anthony's Nose on the other side of the Hudson, and the boom of logs which was actually a series of rough hewn tree trunks bound with iron hoops and links like the rungs of a ladder were now useless.³⁴ These things are of value only when the whole ensemble is protected by powerful batteries. These obstructions, along with rope hawsers, were easily severed by the British the following day.³⁵

Perhaps the most disappointing blow of all was the fate of several Continental ships-of-war, including the frigates *Montgomery*

³³A well documented and clear account of this is in Carr and Koke, pp. 31-39.

³⁴Apparently the original idea was to use "four or five booms of logs," such as are used in lumbering where water transportation to a mill is required; these would extend all the way across the river, if secured together with suitable chains. However, an entirely different idea was actually used. The best reference for this is the segment of the actual boom, probably that from West Point, preserved in the Newburgh museum.

³⁵*Year Book*, Dutchess County Historical Society, 1935, says "cut off by British artificers"; hereafter Dutchess County. A diagram in Boynton, p. 70, of the West Point chain would indicate that cutting would be necessary. However, cleaves, which could be opened easily, were included in the West Point chain at least; Boynton, p. 57.

and *Constitution*. They had moved down the river in accordance with General Putnam's orders, even though undermanned and poorly equipped. The wind was strong from the north; the crews hadn't the skill to sail up the river, nor the strength to pull their vessels to safety with their boats.³⁶ The *Montgomery* was set on fire by her crew and eventually blew up as she lay helpless close to the chain; several smaller vessels were similarly destroyed within a few hundred yards. The *Constitution* went aground and was burned by her crew considerably farther north.³⁷

The Highlands were then practically defenseless above Fort Montgomery. The rather elaborate defense installations on Constitution Island were burned and abandoned by the few defenders, without a fight. The line of chevaux-de-frise opposite Polopel's Island was useless, since there were no manned batteries to defend it.³⁸ The British Navy found the great iron-shod trunks secured in their boxes of stone on the river bottom and pulled them out.³⁹

The British, as already pointed out, had no intention of joining Burgoyne farther up the river. Sir Henry was a cautious commander and was understandably anxious about New York City, which was his primary responsibility. The temporary capitol of New York State was then at Esopus, also called Kingston. The British burned this place and a few other things in this general vicinity. Light vessels of the British Navy

penetrated as far north as Saugerties on 17 October 1777, the day Burgoyne surrendered 45 miles farther north at Saratoga, but Sir Henry Clinton was already returning to New York City as early as 10 October 1777.⁴⁰ Fort Montgomery was demolished,⁴¹ and a temporary garrison was left at Fort Clinton, but this was withdrawn about 27 October 1777, after the news of Burgoyne's surrender had been confirmed. The victorious Northern Continental army of nearly 20,000 men was far too strong for Sir Henry Clinton to risk a part of his relatively small command defending an incomplete work 50 miles north of his main position.

The Highlands were once more back in American hands, but the original fortifications were almost valueless. The British had taken or destroyed more than 100 guns, the chain, the boom, and all American naval vessels built or building in the Hudson. In addition to the river fortifications, the Continental Village above Peekskill had been destroyed. This was perhaps the best winter quarters for American troops in the country. The damage was very extensive indeed.

FINAL SYSTEM OF HIGHLAND FORTIFICATIONS

Clinton's breakthrough and destructions were probably blessings in disguise. They did no permanent harm, since he held the Highlands only 20 days. As often happens in war, the second system of works was far stronger than the first due to the experience gained in losing the first. There was now time, because of Burgoyne's surrender, for Washington and his staff to carefully plan proper fortifications in the light of experience in the recent past both here and elsewhere. The combination of a chain and a

³⁶Many references; Stedman, vol. I, pp. 405-06, is most picturesque.

³⁷Clinton Papers, vol. II, p. 394.

³⁸Dutchess County, p. 98.

³⁹There is a tradition that this line of obstructions was built in part with impressed Tory labor, and that one of these Tories showed the British where they were. This is unlikely: Force, vol. III, pp. 324, 860; Clinton Papers, vol. I, pp. 571, 617. Machin's battery near New Windsor was originally constructed to command the river here, but was not defended. Remains of this battery are still clear, but the river is too wide here to be effectively controlled by even the largest guns of that day.

⁴⁰Nickerson, p. 391.

⁴¹Apparently, the British never intended to keep Montgomery and may have begun their systematic destruction of it earlier than that of Fort Clinton, where the remains of the works are more in evidence today.

boom of logs with water batteries at both ends could be relied upon to close the river, but these water batteries must be secure from land assault. So another careful study was made of the entire area and a new system was evolved.

West Point and the island opposite were the key to this system. Washington himself designated this location.⁴² It involved a completely different arrangement of fortifications. This new plan was not only far stronger, but more adapted to Washington's use of the Highlands. Communications on the west side of the river were now more important militarily, although those with New England were still the primary consideration in holding the new country together politically and economically. A new chain and boom were now placed here.⁴³ All efforts to close the river were concentrated at this single point. A single defense community was set up which was strong from any angle of approach. The water batteries at other points were weak and actually for other purposes.⁴⁴ Mere outposts were established at the entrance to the Highlands.

The landside defenses were now far more important than formerly. Fortunately, Constitution Island was almost perfectly situated for Washington's use. It was separated from the eastern mainland by only a small stretch of water, but by a wide and fairly easily defended marshland. There was no possibility

of large vessels passing between the island and the eastern mainland. It would be very difficult for soldiers to attack the island from the mainland.⁴⁵ In other words, only the island need be held on the east; it could be supplied, reinforced, and controlled easily from West Point on the other side of the river. This fitted perfectly into Washington's strategic plan, as his communications with West Point from his positions farther south in New Jersey were to the west of the river.

It should not be inferred, however, that this shift of emphasis from the east to the west side was either complete, or without fluctuations. The only good road paralleling the Hudson was to the east—the old Albany Post Road. Two or three important batteries were maintained on the long hill across from West Point—now called Fort Hill. The Beverly Robinson House, situated between these points and the river was frequently used as the Headquarters of the Continental Commander in the Highlands. During the joint action with the French against Newport, Washington transferred a portion of his main force from west of the river to the east.

West Point and Constitution Island were nevertheless the basic defenses, and these were independent of communications to the east. The actual fortifications consisted of water batteries at either end of the chain and boom, and other water batteries both at the Point and on Constitution Island covering the open stretch of water before the river bends sharply around the Point. High above the river on the Point there was an enclosed

⁴²Washington to Major General Putnam, 2 December 1777, as quoted by Forman, p. 9.

⁴³Heusser, p. 141.

⁴⁴Mainly to prevent the interruption of King's Ferry by small naval forces of the enemy. The breakdown of artillery given to André by Arnold and quoted in Lossing, vol. I, p. 722, shows three pieces at both Stony Point (one iron 18-pounder and two iron 12-pounders) and Verplanck's Point (three small mortars). Colonel Rufus Putnam built a small open battery on the site of Fort Montgomery in August 1779, according to Carr and Koke, p. 52. Samuel Richards, "Personal Narrative of an Officer in the Revolutionary War," *United Service Magazine*, Series 3, vol. IV, p. 80, under date of 3 June 1778, refers to "cannon brought back after being used to drive ships away from King's Ferry;" hereafter, Richards.

⁴⁵At the time of the Revolution, this was a tidal swamp with a small creek through it, and is little better today. Richards, p. 55, states it to have been on 21 March 1778, "half leg deep in mud and water, and could not get across . . ." However, a battery was "to be erected . . . to hinder the enemy from getting in the upper river by way of the creek with small armed boats." Lieutenant Colonel Gouvion's report on the State of the Works at West Point, 2 November 1780, in West Point Library.

fort named at first Arnold and, after his defection, Clinton.

On the plain beside Fort Arnold, there were barracks and warehouses. About a half mile on a rugged hill stood Fort Putnam; around it at a rough radius of about a mile were other works called redoubts and batteries connected by semi-fortified trails situated in good natural positions overlooking streams, small fields and roads. The whole was very strong indeed, and Knox was voicing the feelings of the army when as early as 7 May 1779⁴⁶ he said he did not fear for the post.

The fortification of West Point was begun in January, 1778, at first under the direction of a French engineer, Lt. Col. Louis Dashaüy de la Radière. Later a Pole in our service, Col. Thaddeus Kosciuszko, was of great value. The basic structure discussed above slowly grew under the hands of thousands of men; minor changes and additions were made constantly. Perhaps the whole reached its ultimate strength under Knox, who became commander on 29 August 1782,⁴⁷ after the danger of attack had passed.

Even more important than the main fortifications at West Point were the ten to twelve miles of rugged country extending to the south end of the Highlands.⁴⁸ Surprise was impossible so long as outposts were vigilant. An advance through these mountains, then mainly roadless, would be extremely hazardous in the face of a strong enemy.⁴⁹ In order to retain this situation, Washington refused to occupy the British fort at Stony Point after Wayne took it in 1779. After all usable

cannon and supplies had been removed it was razed and abandoned.⁵⁰

To the east of the Hudson, there is rolling country between Manhattan Island and the Highlands. There is little continuous rugged country. This is not true of the land to the west of the river; in fact, the Palisades, when first examined, seem extremely defensible. These verticle masses of igneous rock, rising to heights of 400 feet above the river and only about a quarter mile wide, are most unusual.

This long narrow formation extends almost to the Highlands. At its northern end, the range broadens out into small mountains with steep faces. Yet the military strength of this territory is limited. To the west, there is a belt of low, in part swampy, country unfit for defense but good for surprise and encirclement. After Cornwallis so nearly cut off General Nathaniel Green and his garrison in Fort Lee, Washington made no attempt to hold any part of the Palisades and used the low country behind as a kind of neutral zone into which he sent patrols frequently.⁵¹

Since the range of mountains forming the Highlands—locally called the Ramapos—intersects the river at an angle, the low country between this range and the Palisades is roughly triangular. There were two main roads in this area leading north. The valley road lay roughly in the middle of this area and ended at Haverstraw at the end of the Palisades. The foothill road lay further to the west in the hills in front of the Ramapo Mountains. Both routes were, therefore, somewhat exposed to the British attacking across the neutral ground. The danger became greater as the roads drew closer to the river. The British Navy gave the enemy freedom to attack where and when they liked.

⁵⁰Freeman, vol. V, p. 115 with his usual complete references.

⁵¹This neutral ground extended all round the British New York defenses; Freeman, vol. V, pp. 125-30.

⁴⁶Drake, p. 61.

⁴⁷Brooks, p. 167.

⁴⁸Several roads crossed the Highlands west of the river: Boynton (Map), opposite p. 44.

⁴⁹There was only one "usable" road across the Highlands on the west side of the river within reach of a force using the river for their line of supply. This crosses Dunderberg through "the Timp." It was probably improved somewhat after the British used it in October of 1777, but was still extremely steep in places. It remains but a difficult trail today.

Throughout the Revolution, this country was frequently the scene of British activity, and at various times they held several points on the western shore.

The main road from New England crossed the river at King's Ferry at the southern end of the Highlands and then joined one or the other at these roads. The valley road through Scotch Plains, Springfield, Orange, Bloomfield, Acquackanonk and Paramus (now Ridgewood) has largely lost its identity in the growth of highways and the suburban metropolitan area. However, the foothill road is now in part United States Route 202 through Suffern, Pompton and Boonton to Morristown. Morristown was well protected behind the defenses at Middlebrook, but the northern part of even the foothill road was exposed.

When the British occupied Stony Point, King's Ferry was closed to Continental use, and the valley road was seriously affected. However, these things were not disastrous. A simple detour up the Albany Post Road on the east to Fishkill and across the river to New Windsor solved this problem. The trip could be continued behind the mountains to the Ramapo Gap, or by crossing the Highlands near the river and using the foothill road. In either case, however, the foothill road from Suffern to about Pompton was somewhat exposed.⁵² Washington did not like this situation; his communications with West Point were almost as important as the Post itself. He opened, therefore, a military road that ran from Morristown behind the Ramapo Range to the gap,⁵³ which was fortified.⁵⁴ He was able to communicate, if need be, entirely behind the mountains from Mor-

ristown to New Windsor and then over Storm King Mountain to West Point.⁵⁵ This second road system was well removed from British interference. The ultra-modern Route 17 from New York City now passes through Ramapo Gap and continues north behind the mountains for some miles very much as the old roads did in 1778.

THE CAMPAIGNS OF 1778-1780

With the above general conditions in mind, let's return to actual operations. The new system of defenses was surprisingly quickly put in a state to repel an attack.

Heavy guns arrived at West Point on 25 May 1778.⁵⁶ A stronger chain had been stretched across a month before,⁵⁷ and the boom followed a short time later. In addition to obstructing the river, both of these served as emergency bridges, as men could cross the river dry shod on either.⁵⁸

In the Spring, Sir Henry Clinton succeeded Sir William Howe in command of the British armies in America. The British immediately abandoned Philadelphia and returned overland across New Jersey to New York, fighting on the way the drawn battle of Monmouth. The strategic situation was now very much as it had been the two years before. Again Washington's army lay mainly around Morristown. He made full use of his line of communications stretching from West Point to Philadelphia. The Delaware River, since it was impassable to all forms of fighting ships above Trenton, presented no problem.

In the meantime, however, one completely new factor emerged. A French fleet and army

⁵²This road is still traceable; the new Storm King Highway—not that blasted out of the river face of the mountain, but the newer super-highway over the mountain—coincides with the old Continental road in part. It should be remembered, however, that during the Revolution transportation by water was used whenever possible.

⁵⁶Richards, p. 77.

⁵⁷Heusser, p. 138.

⁵⁸Boynton, p. 77.

⁵²Ward, p. 587; Carrington's Map opposite p. 302.

⁵³The remains of a portion of this cordoroy road were revealed by the draining of Lake Wee-wah near Tuxedo Park, New York, in 1954, as an indirect result of the building of a new super-highway.

⁵⁴The remains of Fort Sidman near Hillburn, New Jersey, at the southeast entrance to the Ramapo defile are still extant.

arrived off Sandy Hook, but as the large French ships-of-the-line drew too much water to enter the New York harbor area, it was decided to attack Newport in Rhode Island instead. Again the Continental troops went north in front of the Ramapos; a large part of them crossed at King's Ferry or further down the river at Haverstraw.⁵⁹ In August, Washington again occupied White Plains, so after two years of fighting he was back almost where he started, while the British were cooped up in New York City and its tributary islands.

But the attack on Newport was doomed to failure. Sullivan, the Continental commander, had at one time 10,000 men including two Continental brigades from Washington's main force under LaFayette, as well as militia. In part due to friction between the allies, and in part the appearance of a British relieving fleet and a severe storm, nothing was accomplished.

In the early fall, heavy forces of British and Hessians from New York City moved north overland on both sides of the Hudson. These were in reality little more than foraging expeditions, although Cornwallis on the west side had 5,000 men and Knyphauser to the east had 3,000. These moved through the country below the Highlands cutting all roads against light opposition and, as Washington kept his main forces well back from the relatively open areas, there was no full scale clash between the opposing forces.

The winter of 1778-1779 was spent by the Continental army on both sides of the Hudson. The weather was comparatively mild, and as both the British and American forces remained long in their winter quarters, a great deal of work was done on the West Point defenses during this period.

Finally, on 28 May 1779, Sir Henry

Clinton moved up the Hudson with 6,000 men and landed on both sides of the river just below the Highlands. There was an uncompleted Continental work on the west side at Stony Point which was abandoned without a fight. On Verplanck's Point to the east, there stood a small completed fortification known as Fort LaFayette, which was surrendered after being surrounded, and some 70 North Carolina Continentals were made prisoners.⁶⁰

Washington had West Point strongly garrisoned. In addition he moved his main army up the west side of the river and interposed it between the British at Stony Point and the fortifications around the Point. Sir Henry Clinton completed the Stony Point defenses but as he could do no more, he left a garrison here and at Varplanck's Point and retired down the river.

Washington planned an attack on both these posts. Wayne carried out the attack on Stony Point successfully on 16 July 1779. The British lost almost 700 in killed, wounded, and prisoners as well as the fort and all it contained. The attack against Verplanck's Point failed. After an inspection and careful consideration, as already pointed out, Washington, because of its exposed position, decided against the occupation of Stony Point.⁶¹ The works were burned, or otherwise gutted.⁶²

In the spring of 1780 in the north, things had to some extent reached a crisis. The Continental Army and many civilians were discouraged by internal conditions. On the other hand, Washington's strategic position from the Highlands to Philadelphia was even more trying on the enemy. Sir Henry Clinton felt that he could not attack the Highlands,

⁵⁹Stedman, vol. II, p. 149.

⁶¹Freeman, vol. V, p. 115.

⁶²Most fortifications in the Highlands were composite affairs of stone and masonry base walls with timber and fascines above. See particularly Arnold's report taken from André and reproduced by Lossing, vol. I, notes pp. 722-23.

⁵⁹As usual when no enemy offensive activity was expected, these forces used the "valley road" which was presumably better, but more exposed to attack from the Palisades; Ward, p. 587.

or Washington's somewhat flexible positions to the south and west. Washington could concentrate his forces easily, and relatively quickly, at any threatened point. Ample warning was assured by the nature of the country which had to be crossed. Beacon fires or signal cannon announced any maritime advance up the Hudson.⁶³ Assuredly, the British felt hemmed in. They had only the islands around New York Harbor, and the "neutral ground" which surrounded them outside these was most unfriendly.⁶⁴

Actually, the British force in New York was relatively weak; a large part of their army had been sent to the south where the British southern campaign was now in full swing. The British feared, and to some extent the Continentals planned, an attack on New York.⁶⁵ Meanwhile, however, the Highlands were in extreme peril. All through the summer, Benedict Arnold, who managed to be made Continental commander in the Highlands, was planning to sell out to the enemy. By this time, The British were well aware of the tremendous value to them of this position.⁶⁶

The André-Arnold meeting, papers taken from the former, the flight of the latter, and the final complete failure of the whole con-

spiracy are well known.⁶⁷ But the actual mechanics of the plan to give West Point to the enemy are usually not clear. One shudders to think how easily it could have succeeded. It depended upon four factors and one vital condition that was not fulfilled: first, André had to get back to Sir Henry Clinton with the details of the plan and set the British ships in motion up the river; second, the mobile Continental forces, which would have undoubtedly moved north, had to stop between Stony Point and the Highlands proper;⁶⁸ third, Arnold had to manage to dissipate most of his garrison by sending it south, east, and west, as if to meet the enemy at the edge of the Highlands, and he also had to weaken the chain and boom by removing some clevis pins, or links, so that British ships could get through the river;⁶⁹ fourth, Arnold had to mismanage the river defenses with his reduced force so that British soldiers and sailors could get ashore and give Arnold a tangible excuse for a quick surrender. The British, already thoroughly briefed in the land side defenses by means of plans and descriptions,⁷⁰ would then quickly take over the whole West Point defense system, and, with Arnold's aid, try to beat the inevitable Continental counter-attack.

The one vital condition for all this was the absence of Washington himself from the area. He passed through Peekskill on his way to a conference with French officers at Hartford on 18 September; he was not scheduled to return for several days. The surrender of West Point was to have taken place during Washington's absence, if André had not been

⁶³Arrangements were made at various times for quick notification of the garrison at West Point of an attack up the Hudson; beacon fires and the firing of cannon were to give the alarm. Sentries placed on the South Bastion of Fort Arnold were cautioned to be particularly alert for the firing of the beacon behind the battery on the site of Fort Montgomery; *Orderly Book of Continental Army—12 February 1779 to 8 July 1779* (copy in West Point Library), entry, Headquarters West Point 1 July 1779. After Arnold's treachery, a gunboat was stationed at Anthony's Nose for the same purpose; Carr and Koke, p. 52.

⁶⁴This neutral ground on both sides of the Hudson was unfriendly to both sides; bands of criminals masquerading as Cowboys (Tories) and Skinners (Whigs) preyed on both sides almost equally. They seldom fought, but robbed the weak indiscriminately. Boynton, p. 135.

⁶⁵Carl Van Doren, *Secret History of the American Revolution* (New York, 1941) p. 322; hereafter, Van Doren.

⁶⁶Nickerson, p. 207.

⁶⁷Van Doren; this work is extremely good in connection with this whole regrettable series of events.

⁶⁸They had done so in 1779, and again in May 1780, when Clinton had moved up the river to occupy Stony Point and Verplanck's Point temporarily; Nickerson, p. 206.

⁶⁹Lossing, vol. I, p. 720.

⁷⁰Some of these were already in British hands; others were in André's boot when he was captured; Lossing, vol. I, p. 721.

captured. Washington returned to Arnold's headquarters on 25 September, and might easily have thwarted the whole plan, even if it were proceeding according to schedule.

Actually, André's capture on 22 September ended the real danger. The British could not proceed without the information he was carrying back both in documents and in his head. Three days elapsed before Arnold heard of his capture which meant, of course, his own (Arnold's) incrimination. While Arnold was escaping down the river, Washington quickly put the fortifications in a state of defense, and the British did not attack.

The winter of 1780-1781 was unpleasant in every way, yet the Continental army occupied posts from Middlebrook to the Highlands and into Connecticut still strangling the British in New York. Although the long war was sapping the energies of both sides, Washington was winning by strategy, despite his usual inferiority in forces. His advantage in handling positions and transportation was making up for his shortages of disciplined efficient soldiers. So long as he held West Point, there was little the British could do in the north.

THE CONCLUDING PHASE

The actual fighting of the final and greatest of Washington's campaigns opened with a dubious attack on New York, probably a feint down the east side of the Hudson early in July, 1781. Washington had about 5,000 men. Rochambeau with about the same number of French Allies had recently arrived from Newport. It seems unlikely that a real attack could have been seriously planned against Sir Henry Clinton who had 14,000 behind rivers and fortifications, but the effort was certainly useful in keeping the initiative in Washington's hands.

Clinton with the main British army was in New York, and Cornwallis with a smaller

but more active force was in Virginia. Washington now decided to attack the latter with the aid of the French Army and Navy. In a superbly executed strategic move to his right flank late in August, he and the French marched to the head of Chesapeake Bay, where they were ferried down the bay by the French fleet to the peninsula above Yorktown. Heath, the original commander in the Highlands, in 1776, was again left in charge with perhaps 2,500 to hold West Point against Clinton who now had about 17,000.

Clinton was deceived by the first attack on him in New York near Kingsbridge. The French, who crossed the Hudson just below the Highlands appeared to make preparations to attack Staten Island from New Jersey, but then secretly marched south. Somehow everything went well for the Allies. Cornwallis with his entire force was surrounded, besieged and captured. In the meantime, Heath seems to have convincingly concealed his weakness until he was again reinforced.

The fighting war was now virtually over. New York and Charleston remained in British hands for two more years, but no battles were fought in 1782 and 1783. Throughout the new nation, people turned to peaceful pursuits, as if a full treaty of peace had been concluded. Yet some sort of an army had to be kept in the field.

West Point and the Highlands were the scene of many troubles during the two years between Yorktown and final demobilization. During the winter of 1781-1782 Heath and his subordinate McDougall indulged in an official exchange of words and name calling. The final winter saw the dreadful troubles in the Continental Army encamped between Newburgh and West Point, which could have had very serious and upsetting consequences but for Washington's great capacity to deal with men.

Major General Henry Knox was chief of

artillery under Washington. He was also perhaps the foremost military engineer in the Continental Army. He laid out some of the fortifications outside Boston in 1775. He advocated the Arsenal at Springfield in 1777 and had the first American military academy at his headquarters at Pluckemin in New Jersey in the winter of '78-79. He established his headquarters near West Point in November 1781 and busied himself writing a report on the fortifications. On 29 August 1782, he was invested with the command of all the forces in the Highlands, and under him, West Point became the center of the Army, and also the main depository of arms from the disbanded Continental forces.

The importance of the West Point fortifications dwindled with the passage of years; but even during the Civil War the post was still defensible. New model Columbiads were

installed in water batteries to control the Hudson at this point. Some of these guns and fortifications remain; now useful only for decorative effect. It is unlikely that the Hudson, except for New York Harbor, will ever again play a significant part in military campaigns.

Although Knox undoubtedly continued his lectures and classes at West Point during his period of residence there—he was perhaps the earliest advocate of a military academy⁷¹—the present United States Military Academy was not officially established until 1802. Professionally, in its production of solidly grounded military men, many of them of the highest order of leadership, West Point continues to symbolize the power of Washington's original bastion on the Hudson.

⁷¹Boynton, p. 177.

COMMODORE KNOX ON MILITARY ROADS

To the Editor: An astonishing disregard of the Naval factor, and a serious distortion of facts, seem to occur in an article on "Military Roads for War and Peace", appearing in your Spring, 1955 issue*, just received. Therein, the building of roads in Northern Ohio is alleged to have assured General W. H. Harrison of "a successful movement northward to attack the British. His force was so superior to the British and Indians that he easily won the Battle of the Thames in Ontario on October 5, 1813, and regained Michigan Territory as a result."

Nowhere in the article is there even mention of naval forces, much less of Commodore Perry's famous victory over the British squadron on Lake Erie. In view of the wilderness ashore the main British Line of Supply to their army in northern Ohio

of necessity lay on the Lake. Hence the American naval success suddenly cut the vital water supply line of the Ohio British Army and forced it to retreat precipitately. Hence Harrison could then advance easily, without serious resistance.

Did Harrison follow the British around the head of Lake Erie, along the shores of Ohio and Michigan, as is inferred by the above quotation? *He did not.* Once more the naval factor so blandly ignored by the author was decisive. Commodore Perry embarked General Harrison's Army on board the ships of his squadron and ferried it across the Lake. This refreshing short-cut enabled Harrison to intercept the rapidly retreating enemy at the Thames, in Ontario. In the ensuing American Land victory, Commodore Perry led the cavalry charge!

Signed: Dudley W. Knox

*Military Affairs, XIX, 1 (Spring 1955).

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Editor: GEORGE J. STANSFIELD

REVIEWS

Power and Policy: U. S. Foreign Policy and Military Power in the Hydrogen Age. By Thomas K. Finletter. (New York: Harcourt, Brace & Company, 1954. Pp. 408. \$5.00)

Mr. Thomas K. Finletter, private citizen, has made an outstanding contribution to American thought in a most critical hour. A serious and timely book by any recent high governmental executive is important reading. But *Power and Policy* is infinitely more than that. It is nothing less than a report by a highly informed and intelligent American to all who profess serious concern about the elementary problem of the survival or the annihilation of the United States. Indeed, this book deserves a much wider audience than merely the statesmen and professional military men who daily grapple with the business of national survival.

The contribution of Mr. Finletter to American thought is, in the opinion of this reviewer, found in his blunt and logical definition of the problem of survival rather than in the recommendations for action he makes. His purpose in writing this book, he achieves. This purpose was an attempt to interrelate foreign policy and military policy in a manner in which the nation may eventually reach "conclusions as to the kind and quantity of armed forces we need to back up our foreign objectives." Whether the Russians intend to lay down a wholesale atomic blitz on the United States once they achieve such a capacity to do so, a capability Mr. Finletter estimates they will have next year, perhaps remains an open question. Mr. Finletter is brutally frank and refuses to be sheep-like about the central fact that the Russians will one day have this capability. The grim picture the author paints so coldly will perhaps make this

book an unattractive purchase for as wide an audience as it genuinely deserves.

Power and Policy is divided into four coherent parts. The "Intolerable Atomic Absolute" is the major challenge to which the entire book is Mr. Finletter's response. Within the context of the defense of the United States (Part I), the "Intolerable Atomic Absolute" is simply the existence of global-ranged aircraft (some perhaps pilotless soon) and their possible nation-smasher payloads in the hands of both the West and the Russians. This is Phase II in the era of atomic development. Phase I, the era of U. S. atomic monopoly, Mr. Finletter says is soon to end. He asks, "Now what?" His answer is that the United States must be "so overwhelmingly ready" for World War III that the Soviet Union will not start it or allow it to start. No thinking American disputes this undeniable appeal to the high regard of the Soviet leaders for the role of force in their domestic and external policies.

In the first part of his treatise, Mr. Finletter demonstrates that the United States has established a workable coalition in NATO to promote U. S. interests in a manner consistent with both our political interests and our military weapons including atomic capabilities. Communist aggression in Europe can be quickly defined and effective military action taken, if necessary, for local aggression in Europe would mean World War III. In his discussion of the so-called "gray areas" or the non-NATO area (Part II of the book), the problem of power and policy becomes more intricate. SEATO has not yet grown to establish a workable judicial base for collective politico-military action to meet all possible cases of local aggression. In Korea, collective action

through the United Nations against local aggression met the situation. Indo-China and Formosa, however, remain but illustrative of the difficult problem of meeting Red Chinese aggression in the Far East. Such aggressions Mr. Finletter recommends can only be met, and they must be met, within the context of higher priorities: the prevention of World War III and the preservation of collective security among the western nations. His accurate prognosis of present-day difficulties in the Far East, written back in the summer of 1954, can best be evaluated by each reader in the light cast by the current headlines.

With regard to the military policy of the United States (Part III), Mr. Finletter speaks from both his authoritative experience as Secretary of the U. S. Air Force and his detailed definition of the major problems of U. S. foreign policy. He urges the following priorities for sound planning of the structure of military forces; (1) NATO atomic air; (2) air defense of North America; and (3) "ground, sea, and non-atomic air which the U. S. should contribute to the NATO." For the non-NATO areas, secondary in order of importance to Mr. Finletter, he recommends the following: (1) U. S. ground, sea and air forces permanently deployed; (2) "mobile naval, air and amphibious forces" to work as a team with the forces of massive retaliation in accordance with the New Policy of 1954; (3) such additional forces, as needed, to carry out the massive retaliation policy outside the NATO area; and (4) general-purpose forces useful if there were a long war with Russia or China or both. These priorities can only sensibly be discussed within the context of Mr. Finletter's thesis, a task beyond the confines of this brief review. When he analyzes why he considers the present U.S. military forces essentially a product of compromise rather than planning (Chapter VII), he writes on delicate matters involving the organization of our national defense. Here, above all, he fearlessly stands forth as a worried American and provides much nourishing food for fruitful discussion. These are the informed thoughts of a man who knows how the Pentagon operates internally and they would deserve serious attention for this reason alone.

The last section of *Power and Policy* is a philosophical discussion of the basic purpose of military power of democratic nations. Technological change in machines and firepower has drastically altered the political and military interests of the United States in a troubled and shrinking world.

This fact is no "wild blue yonder" stuff. Weapons remain, says Mr. Finletter, but one of the important means of determining foreign policy. No confusion on means and ends can be found here. Mr. Finletter bravely suggests that the securement of an atomic stalemate best assures long-term stability in the world balance of power. Atomic disarmament and collective security must be intensely pursued with imagination and realism instead of wishful thinking, so that appeasement and inaction by the West will not prompt the inevitable catastrophe which would follow such a bankruptcy of policy. Neither can the strategic clock be turned back to the pre-atomic age nor do the mutual existence of atomic weapons on both sides cancel themselves out. The means, Mr. Finletter pleads, must be sought by the United States to promote the achievement of a more perfect peace. Time is fast running out.

Whether Mr. Finletter is right or wrong in his specific recommendations is not of the first importance. It is important, however, that the platform for healthy discussion and unemotional debate contained in his *Power and Policy* be closely examined by the nation's creative minority while there be time for sound thought and intelligent action.

May it come about that the political and military realities of today and tomorrow be understood well enough soon enough to spare this nation the ancient fate of democracies of causing to happen by inaction that which they made the greatest effort to avoid.

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Assignment to Catastrophe. Vol. I, Prelude to Dunkirk, July 1939-May 1940. Vol. II, The Fall of France, June 1940. By Major General Sir Edward L. Spears. New York: A. A. Wyn, Inc., 1954, 1955. Vol. I, pp. 332; Vol. II, pp. 333; illustrated; index; \$5.00 each volume.

Clinical examinations of coalitions and of ailing nations in defeat are useful for those who would learn from the disastrous experience of others. This is particularly true for the American people today. The downfall of a sister republic where the weaknesses of a democracy were incredibly exaggerated and stressed beyond the elastic limit can profit us immeasurably. Here we can observe the symptoms of the moral and physical sickness of a nation. We can watch the progress of the

disease from early stages through the crisis to the end. If we are wise we can apply these lessons in the perilous years ahead.

The devastating events of 1940 with a brief prelude in 1939, are the subject of these two epic volumes. Of course they do not begin to tell the whole story of the fall of France. Human error, military, political and social, in the nineteen thirties piled up on the graves of a million Frenchmen killed in the first World War prepared the catastrophe. But General Spears deals with the tragedy of 1939-40 which he watched from an Olympian peak as it unfolded. He not only observed it, however; he himself played an important role in it.

The tragedy is of Shakespearian proportions. In it General Spears shows us the deterioration of character and the tragic consequences of the deeds and decisions of men afflicted with moral weakness and helpless to escape the inevitable doom which results from sins of omission and commission. It was not ineluctable Fate that caused the tragedy—General Spears makes that abundantly clear—but it was largely corruption of character, national and individual, which brought disaster to France in 1940.

It was on May 22, 1940 that Prime Minister Winston Churchill sent for Major General Sir Edward L. Spears. "I have decided," he said, "to send you as my personal representative to Paul Reynaud. . . . The situation is very grave." Churchill did not define Spears's mission. Obviously someone was needed to maintain personal liaison between the British Prime Minister and the French Premier. No Britisher was better qualified to do this than General Spears. He had had a distinguished career as soldier, Member of Parliament and writer. He spoke fluent French. He knew and loved that country and its people. We who read and enjoy his two volumes are the beneficiaries of an acute observer, a remarkable stylist and a perceptive analyst of human behavior.

The crisis of 1940 did not encourage objectivity in the relations of peoples in disaster. We cannot forget that, try as he will, General Spears is still human and that his testimony is necessarily *ex parte*. I, too, served in France, in close association for many years with both the French Army and Navy. In reading General Spears's bitterly severe denunciation of General Weygand, there seems to me to be another side. I venture to quote from a personal letter General Weygand wrote me on February 8, 1953: "For my part I can only say this: in good conscience I did my best.

But that does not prevent this moment (of requesting an armistice) from being the most agonizing of my whole life and I shall think of it with sorrow until my last day."

In justice to General Weygand and to France, therefore, I recommend that after reading these two magnificent volumes, you hear the other side. General Weygand's *Recalled to Service* describes the turmoil and chaos of the military disaster which he inherited. In many ways it answers or explains such comments as those concerning Weygand's "unflagging hostility to the British" and references to him, for example, such as "a hysterical, egocentric old man."

The hero of this tale of woe is Winston Churchill, and quite properly so. Reynaud is a close second. Other characters such as the cold, efficient Mandel and generals and statesmen on both sides of the Channel have their hour, but they will not be forgotten by the fascinated reader of these vivid pages. As the Nazi tank-dive-bomber team broke up allied defenses and crumbled morale the story can be summarized in a few words: On the continent, "the slimy mess of disastrous incompetence revealed in France" was balanced in Britain by "the cheerful inefficiency of our amateur attempts to cope with the grim reality of a robot war."

Future historians will be grateful for this eye witness account of the fall of a great nation. People today will find in these volumes military-political history and the gyrations of men, and women, too, at a turning point in history, told in a way to hold one's interest and attention as few novels are able to do.

DONALD ARMSTRONG
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Washington, D. C.

The War in France and Flanders, 1939-1940.

By Maj. L. F. Ellis. (London: Her Majesty's Stationary Office, 1953. Pp. xviii, 425 incl. supplement, appendices, and index. Twenty maps, 17 sketches, and a German situation map inside back cover. \$8.75.)

Major Ellis' excellent book is the second of the military series of the official United Kingdom history of the Second World War. It is a definitive account of British operations in the ill-fated campaign of 1940 which culminated in the fall of the Low Countries and France and in the expulsion or destruction of the British forces committed on the Continent. The book is of highest professional interest to officers of the Army, Navy, and Air Forces because of the many lessons in inter-Allied

and interservice cooperation. The book also illustrates again that the records of defeats are more instructive than those of victory for defeats bring out most clearly the consequences of mistakes and failures. Conversely, the records of victories tend to conceal mistakes and failures.

The British experience in France and Belgium in 1940 furnishes another historical example that opening campaigns and the meeting engagements are periods of uncertainty when new weapons and differences in organization, tactics, and techniques show up most clearly. The armies of France and Great Britain and even to a greater extent those of Belgium and Holland were still characterized by outmoded weapons, communications, organization, tactics, and command arrangements. The German Army was a new model and included a large number of tanks which were employed in mass and with the support of the Luftwaffe.

Aggressors always have the advantage of the initiative; Hitler did in 1940. On 10 May, he opened the campaign in the west, attacking simultaneously neutral Holland and Belgium and the Allied Army which passively defended the French frontier. The British Expeditionary Force, under the command of Lord Gort, included 10 infantry divisions, half Regular and half Territorial. One armored division reached France but too late to fight as such. Some units of the British Army were incomplete and others had not completed training. The British constituted but a small part of the Allied forces under General Gamelin. Operationally, Gort's command was attached to General Georges' French North-East Theatre of Operations which covered the frontier on the extreme left. When the Germans attacked, Georges' command advanced to the support of the Belgians. But the weight of the German attack struck farther to the south through the Ardennes and quickly disrupted the front, splitting the Allied armies. Coordination became difficult and Lord Gort was again moved down the ladder and attached to General Billotes' French First Group of Armies. Effective coordination was never achieved and the Allies were unable to launch a counterattack against either flank of the German penetration.

The British fought in successive positions and managed to escape at the price of heavy casualties, but only with the help of the French First Army and the Royal Navy. The Royal Air Force also assisted.

A recitation of all the lessons to be gleaned from Major Ellis' book is beyond the scope of a

mere review. Probably the most instructive relates to the conduct of operations by a coalition. Although the British Army was under French command, its limited strength resulted in its eventual subordination to an army group commander. But the British commander retained the right to communicate directly with his home government, and his line of supply, which he quickly lost, was naturally based in England. Language difficulties, differences in training and techniques, lack of signal communications, unduly lengthened chains of command, decisions made without adequate information or on outdated information, all contributed to the rout of the Allies. Major Ellis has deftly, though candidly, brought out these things without "opening old sores" or stirring up new controversy.

Because of the magnitude of the operations and the relatively small role played by the British Expeditionary Force, Major Ellis' book is in reality only a unit history. It fails to bring out the Allied plans for the war if there were any. On the other hand, it includes a supplement intended to bring out high level German plans and decisions and to apportion responsibility for successes and failures among Hitler and his generals. The supplement cannot be accepted as definitive even though Major Ellis has made use of considerable primary German source material. Perhaps it would have been better to integrate information of the German side at appropriate points in the story, paying special attention to those things which were of direct concern to British operations.

Major Ellis has probably made the English high command appear more favorable than it did to participants. He has made the withdrawal through Dunkirk to appear as a planned operation well regulated until the last ship had left the shores of France. Anyone versed in military planning can only regard this with skepticism. Nevertheless, the successful withdrawal of so many men is a great tribute to British doggedness and ingenuity in adversity.

This book leaves one with a profound respect for the tenacity, courage, initiative, and resourcefulness of the British soldier and small unit commanders whose sacrifices and heroic deeds together with those of the Royal Navy and civilian seamen and to a lesser extent the Royal Air Force made possible the successful withdrawal of the British Army and considerable numbers of the French Army from France. Therein is found the miracle of Dunkirk even though those desperate men

benefited by the German decision to halt the panzer advance on the Canal Line. But without the help of elements of the gallant French First Army, it still could not have been accomplished.

Although details of its ultimate fate are not given, the heroic stand of the British 51st Infantry Division south of the Somme will always command the respect and admiration of any soldier.

The campaign of 1940 will never be fully understood until it is written from the point of view of the German armed forces which held the initiative throughout the operations and naturally left the most complete records. Major Ellis' work will make the task of a German historian easier to accomplish.

P. M. ROBINETT
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Washington, D. C.

U. S. Military Doctrine: A Study and Appraisal. By Brigadier General Dale O. Smith USAF. (New York: Duell, Sloan, Pearce, Boston: Little Brown, 1955, Pp. 256, \$3.50)

American Strategy in the Atomic Age. By Colonel George C. Reinhardt USA (Ret), (Norman; University of Oklahoma Press, 1955, Pp. 236, \$3.75)

At the winter luncheon meeting of the American Military Institute, Colonel Crystal of the Air Force gave a very provocative address to the members entitled "Machiavelli, Mackinder, and Mahan." A brief comparative analysis of their power concepts was the framework on which he hung his discussion. His challenge, addressed to the members assembled, was to urge them to produce a work of strategy applying to the atomic age, but of the scope, validity and impact equivalent to that of Machiavelli, Mackinder and Mahan in their times.

Both of these volumes are in this area.

General Smith eschews the traditional nine principles of war and sets forth four of his own—military professionalism, unity of command, celerity with the counteroffensive and technical application. He backs them up with an impressive array of historical precedent. Professionalism and unity of command spring from Washington's "Sentiments on a Peace Establishment" and the latter is reflected in the intent of the Constitution's framers to provide only a War Department to conduct all matters of national defense. The further evolution of these concepts is traced to the present, as is "celerity with the counteroffensive." Celerity is seen by the author

as stemming from doctrines of Clausewitz and Jomini as interpreted by Denis Hart Mahan. Celerity is now embodied in the "massive retaliation" doctrine. According to the author "technical application" was first understood by Alfred Thayer Mahan. Recognition that the proper and successful conduct of war changes rapidly with technological advance was his signal contribution to American doctrine.

These principles, and their largely American historical origins so laboriously hammered home by the author, are a fresh and novel approach to the theory of warfare. It is difficult to find fault with them or their impressive lineage. They are, of course, equally applicable to services other than the Air Force and are being so applied.

This work, however, applies them to the Air Force with all the perennial arguments associated with the protagonists of that arm. Air power would have won in 1919 had not Germany collapsed. Billy Mitchell was sacrificed on the altar of military traditionalism. Air power won World War II in both theaters and would have won sooner if less resources had not been diverted to other arms. Korea could have been won had not air power been restricted to South of the Yalu. Many minor arguments against the use of air and atomic power are once again demolished and misconceptions of their employment set aright.

In an attempt to make nuclear bombardment palatable, the author rejects any idea of preventive war. Our "new doctrine" of massive retaliation, he likens to the sheriff of the old West—always poised and waiting, never starting a fight but always quicker on the draw when one starts. This is his principle of "celerity with the counteroffensive" and it is to be achieved by a highly professional personnel, a unified command structure and proper technical application of newly developed weapons and equipment.

General Smith naturally announces these as his personal views and disclaims any official inspiration. However, his drawing heavily on published material by the President and Secretary of State and his high-level position in the Department of Defense hierarchy would lead the reader to feel that this book reflects a certain amount of official (Air Force at least) policy.

While General Smith presents strategic air's version of our military doctrine, Colonel Reinhardt, in his *American Strategy in the Atomic Age*, fully justifies a wider all-service view of America's global strategy and the military doctrine to implement it. In the humble opinion of this reviewer,

Reinhardt comes far closer to answering Colonel Crystal's challenge than does Smith.

Reinhardt writes from several sound assumptions. The harsh realities of Mackinder's geopolitics demands that, at all costs, we must oppose the domination of the Eurasian land mass by a single power or Communist union and attempt to restore the balance of power there. Containment, as a policy, is essentially negative and has failed. Rather, reliance should be placed on deterrent power and less dependence on the local defensive power set up by the containment policy. The strategy of a final hydrogen showdown is sterile in that it limits our freedom of action and favors continuation of the cold war which is the Soviet's path to victory. Deterrent power is best achieved by balanced forces (balanced not as to dollars appropriated to each service but as to weapons systems appropriate to a particular task) composed of powerful task forces which include an array of nuclear weapons. These, rather than "one-weapon" forces, pose the real threat to the enemy in that they can strike anywhere, in any degree and under any condition. Finally, Russian space has always defeated penetrations but Russian expansion has often been thwarted, causing a withdrawal to Russia's borders and crippling internal dissension, by successful peripheral wars.

How does Reinhardt propose to answer these assumptions? First, by a sound defense structure composed of four elements: a navy to command the sea lanes thereby assuring our flow of raw materials and link-up with our allies; powerful balanced nuclear armed task forces composed, as appropriate, of all service elements, to exercise our deterrent power—in marked contrast to the weak divisions sent initially to Korea; a nuclear armed strategic air command even as envisioned by General Smith, poised ready to strike, itself a deterrent to any action by the enemy against our home bases in retaliation over the exercise of our deterrent power; and a continental defense to minimize the danger of enemy retaliation.

Second, by the creation of areas of strength ringing the enemy and manned by loyal allies. This is recognized as a diplomatic problem but our hand must be strengthened by our fully balanced military power.

And third, by taking up a flanking position from strong bases in the Middle East which would threaten any Soviet action to East or West. By such a threat, Reinhardt believes, as throughout history, Russia sooner or later would be forced to the negotiation table, would eventually withdraw to her own borders, and even internal revolt

might ensue.

In summary, General Smith's *U. S. Military Doctrine* is a logical well thought-out exposition of the U. S. Air Force's strategic bombing doctrine. Colonel Reinhardt's *American Strategy in the Atomic Age* is a penetrating analysis of the problems of global strategy confronting us and the best means to meet those problems. Both books are sure to be widely ready and widely commented on. Both undoubtedly will influence military thought.

LT. COL. F. B. NIHART, USMC
Washington, D. C.

The British Submarine. By Commander F. W. Lipscomb, OBE, RN. (New York: The Macmillan Co., 1954. Pp. 269. \$5.00.)

From 1809 until 1901 the Royal Navy disdainfully rejected the idea of a submarine; it just wasn't cricket! The former date was the year Lord St. Vincent demanded that Pitt have nothing to do with developing a weapon which would threaten British sea power more than any other weapon; the latter date saw British complacency shattered by the successful "sinking" of the French battleship FAURÉ GUIBERRY in a mock torpedo attack by the French submarine GUSTAV ZEDEL.

Commander Lipscomb picks up the narrative of the development of the British submarine from 1901 onwards, relates the early trial and failure, and an American submariner will note how closely they paralleled our own difficulties. Becoming operationally valuable in World War I the British submarines were, except for the Baltic area, used to a limited extent—due mainly to a lack of targets—but in World War II they finally came into their own.

Commander Lipscomb properly devotes nearly one half of his book to the World War II exploits of British submarines on the Home Station, the Far East, and the Mediterranean. It was in this last theatre that British submarines sank 1,157,000 tons of merchant shipping and damaged another half million tons.

The British Submarine is an excellent account of an important branch of an Allied service. It is, of course, of primary interest to members of that service, but American submariners will find it of great interest because of its narrative of how our brothers in arms manned and fought the gallant submarines, valorous progeny of Fulton and Holland.

CAPT. SAMUEL G. KELLY, USN (Rtd.)
Washington, D. C.

The Rise of Military Power in Modern China, 1895-1912. By Ralph L. Powell. (Princeton: Princeton University Press, 1955. Pp. 383. \$6.00.)

The value of knowing your enemy is indisputable. A knowledge of the history of your enemy's institutions and their development is essential to knowing him. Ralph L. Powell has filled an existing gap in our knowledge of China by providing this study of modern Chinese military institutions during their formative period.

A misunderstanding of a country's military character can become politically embarrassing. Prior to China's aggression in Korea in 1950 the popular stereotype held the Chinese to be peaceful and to make inept soldiers. This resulted from the pattern of thought about China's 18th and 19th century history as a civil society. Actually, as the author shows, China has grown military minded and has strived to modernize her military forces since the mid-nineteenth century. And, since the revolution of 1911, military men have played an ever-increasing role in political affairs.

The author builds on a background of Manchu military institutions from the 17th to the 19th centuries. He further traces these developments, from the failure of government forces to completely put down the Taiping Rebellion to subsequent failures against foreign troops in the Opium and Arrow wars, the Sino-Japanese War of 1894-95 and the Boxer Rebellion of 1900. The final and most important phase, that from the Sino-Japanese War to the 1911 revolution, is covered extensively and in great detail.

The backwardness of Chinese armies until 1900 is unbelievable. Yet upon reflection it will be realized that up until 1850 China was not threatened from without and so had little incentive to develop modern forces. In the early 1600's when European armies were discarding pikes for muskets, the basic Chinese man-at-arms was a horse archer. By the mid-1900's when Western armies were adopting rifled and breach-loading firearms the Chinese still relied on horse archers, swords, and spears with the addition of crude matchlocks. Not only were the weapons antiquated but every other aspect; organization, communications, supply, personnel and training, were also. The mission of Chinese armed forces was internal security but the Taipings proved them inadequate for even that. Tests against foreign armies spurred the various degrees of modernization at both national and provincial level. Nevertheless, mod-

ernization moved slowly and unevenly in the grip of apathy and the dead hand of tradition. Anomalies such as modern arsenals capable of producing the latest small arms but instead producing ancient matchlocks and, until 1898, examinations for initial commissions consisting of archery, swordsmanship and weight lifting, illustrate the problems besetting the military reformers.

The humiliation of defeat by another Oriental country in the Sino-Japanese War followed by further defeat by Japanese and Western nations in the Boxer Rebellion and the personal discomfort to the Empress Dowager of having to flee Peking, convinced that ruler that reforms were necessary and inevitable. From then until 1911 progress was rapid and wide spread.

Traditionally control in the Empire was decentralized. This coupled with the development of personal and provincial armies and the decay of Imperial rule led to the 1911 rebellion and the subsequent period of warlordism which lasted at least until the consolidation of Communist power in 1950. All of these war lords, Chiang-Kai Shek and Mao's General Chu Teh included, who divided and fought over China for forty years, received their military education in the burgeoning military academies of the significant 1895 to 1911 period.

As a result of post World War II tour of duty in China, Powell resolved to investigate the role of military power in modern China, the development of modern forces and the misconceptions concerning China's military potential. His ultimate aim was to outline the influence and characteristics of Nationalist and Communist troops. He soon found in research, however, that before recent developments could be properly analyzed a full scale treatment of background material was indicated. Thus this book came into being. While it does not go very much beyond 1912, it is hoped that Powell will complete the task he originally set for himself and trace Chinese military history from that year to the present.

The author gives two objectives of his work. The first is to show the growth of semi-personal armies and the rise of militarists to a position which permitted them to seize power upon the breakdown of the Manchu Dynasty. The second is to trace the modernization of the land forces of the Chinese Empire and to evaluate the degree of progress that was made. To merely say that these objectives have been achieved would be an understatement. Doctor Ralph L. Powell, retired

Marine major, assistant professor of Oriental History at Princeton, and currently a civilian faculty member of the National War College has written a scholarly book carefully documented from an extensive bibliography. It will be regarded as a benchmark study in this field.

LT. COL. F. B. NIHART, USMC
Washington, D. C.

Civil-Military Relations. An annotated bibliography, 1940-1952; prepared under the direction of the committee on Civil-Military Relations research of the Social Science Research Council. (New York: Columbia University Press, 1954. Pp. 140, \$2.00, paper.)

Harvard Guide to American History. Edited by Oscar Handlin and others. (The Belknap Press of Harvard University Press. Pp. 689. \$10.00.)

These two volumes are the most important reference books for the student of military history that have appeared in a long time. The first compilation is a cooperative product whose first draft was prepared by Carey Brewer, formerly at Harvard University, and now at the Library of Congress. It continues the American aspects of the bibliography *Civil Military Relations* (Chicago: Public Administration Service, 1940) Pp. 77).

The subject fields covered are: "National Defense and the American Governmental System," "Organization for War and Defense," "Military Management," "Defense and Diplomacy," "Military Government and Occupation," "Intelligence and Psychological Warfare," "Manpower," "Mobilization," "Procurement," "Logistics and Transportation," and the "Growth of the Military Establishment and Civilian Society."

But there are certain major omissions of information. For example, there is no reference to the existence of the National War College, or of the Industrial College of the Armed Forces, either in the text, or in citations to any of the several periodical articles which have appeared on each college. Yet these are the two highest level military educational institutions primarily functioning within the area of "Civil-Military Relations" during the period covered. The failure to be aware of their existence in print causes concern regarding the standards of coverage used in preparing the bibliography.

The thoroughness of checking is to be noted, in that, while military journals are listed in the

introduction, no complete coverage of their articles are made. Readers of *Military Affairs* will find, as examples of omission, that an article by Huzar is not listed on page 13 and no reference is made to Henry P. Beers's excellent series on the administrative history of the Navy. In book material, also for example, Hittle's 1944 edition is cited instead of his 1949 revised edition.

A copy of this outstanding bibliography should be in the hands of every student interested in any aspect of these problems, but it cannot be considered as definitive for the period as it might have been.

The Harvard Guide to American History was prepared by Professors Oscar Handlin, Arthur M. Schlesinger, Senior and Junior; Samuel E. Morison, Frederick Merk and Paul H. Buck of the Department of History. It is a comprehensive revision of the *Guide to the Study and Reading of American History*, by Edward Channing, Albert B. Hart, and Frederick Turner compiled in 1912.

An examination of the table of contents will clearly indicate the areas of interest for the military historian in the pertinent periods of our history. The authors were not concerned, however, with "military history," since the word does not appear as a special subject in section #61. Maritime history does appear, and naval history, etc., are included under "National Defense" as is to be expected.

The editors indicate that December 31, 1950, was the terminal date for publications and point out that they hope errors of omission and commission will be called to their attention (p. viii). From this point of view the lack of recognition of "military history" and of *Military Affairs* as the professional historical journal is regrettable. In this area, the *American Neptune* and the *Infantry Journal*, now *Army Combat Forces Journal*, alone are listed, pp. 164-165, under "Historical Journals and Society Publications." It is to be hoped that a revised edition will correct this error by adding other journals and that an examination will be made of such publications as *The Army Almanac* (1950), *The Guide to Writing American Military History* printed in *Military Affairs* in (1950) and as *D/A Pamphlet #20-200* (1951), for their subsequent inclusion.

Then, too, the World War I publications of the Office of the Chief of Military History are not listed. The student of land warfare will probably wish to add a few other volumes in such a revision as have the Dupuy's. Since the

Guide's publication, the *Military Heritage of America* has been published by Harvard University, Department of Military Science and Tactics in draft form in late 1954.

In summing up these two volumes, their editors' lack of awareness of the riches to be found in military periodical literature is a serious one, since some indication of their buried treasures should be made available to the research minded social scientist. It is not, however, entirely their fault since adequate guides in this area are hard to locate.

Cornell Professor Van Riper's forthcoming article on "A survey of materials for the study of 'Military Management'", to appear in the *American Political Science Review*, will go a very long way in filling up the existing gaps in general knowledge of this most important field. In any case, both of these volumes represent a vast amount of work and their failure to be definitive in our area reflects the magnitude of the tasks still to be accomplished in the field of "military history."

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A History of Mechanical Inventions. By Abbott Payson Usher. Revised Edition. (Cambridge: Harvard University Press, 1954. Pp. 450, pp. 11 bibl. \$9.00.)

This volume is a revision and enlargement of the author's *History of Mechanical Inventions* published just twenty-five years ago. Several new chapters have been added and relatively minor additions and changes have been made in the chapters comprising the original work. The new chapters are devoted chiefly to a consideration of the theory of innovation and are a welcome addition to the literature concerned with technological change.

For those whose acquaintance with technological change is limited to the conventional historical treatment of inventions, this work will add a new dimension of understanding. The volume contains little of specific application to military matters. An enlarged and rearranged bibliography provides a wealth of suggestions for further study.

LOUIS C. HUNTER
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Confederate Letters of John W. Hagan. Edited by Bell Irvin Wiley. (Athens: University of Georgia Press, 1954. Pp. 55, \$1.50, paper.)

In this small booklet Dr. Wiley, whose interest in the common soldier is well known, has preserved a series of letters by John W. Hagan, an enlisted man of the 29th Georgia Infantry, written between October, 1861, and Christmas, 1864.

Hagan's letters are replete with references to his army life and with suggestions to his wife on the administration of home affairs.

Hagan's stories of battles deal largely with the performance of his own unit and those nearby and with references to the killed, wounded, and captured among the friends and acquaintances of the family. His letters of July 11 and 19, 1864, speak highly of General Joseph E. Johnston as a leader and strategist and show the confidence of the common soldier in his policy of retreating before Sherman.

This little pamphlet contains an interesting and representative exposition of army life by an enlisted man representing Southern yeomanry of the day.

RALPH W. DONNELLY
Civil War Round Table
Washington

Wellington and His Army. By Godfrey Davies. (San Marino, California: The Huntington Library, 1954. Pp. 154. \$3.00.)

The Reason Why. By Cecil Woodham-Smith. (New York: McGraw-Hill, 1954. Pp. 287. \$4.00.)

It is seldom that one finds a military scholar of the caliber of Godfrey Davies whose grasp of the pen is as sure as that of a champion fencer on his foil. Far more often the student of military history finds his chosen field served by writers who wield their tool with all the finesse of a drunken Highlander swinging a dull claymore. Encountering the incisiveness and real quality of Mr. Davies' work is a pleasure that should not be forgone by the military reader.

This reviewer must obviously admit to a strong bias in favor of Godfrey Davies. One of the first serious works of military history that found its way into his small library was the *Regimental History of Cromwell's Army* (2 vols., Oxford, 1940) written by Sir Charles Firth in collaboration with Godfrey Davies, and edited by Davies. The standard of scholarship set in these definitive volumes has been carried through in *Wellington and His*

Army. If anything, the system of footnoting, especially the indexing of cited sources, is superior in the new book. The citations are informative without being cumbersome, which in itself is quite a trick.

The book leads one on a journey down a much-traveled road, although the wayside is liberally spotted with bright, new route markers. While it is undoubtedly true that each generation rewrites history to suits its own tastes and foibles, the reviewer feels that Davies has made an original contribution toward understanding the history of the British Army and one of its most famous leaders.

Fundamentally, *Wellington and His Army* consists of a distillation of original sources on the Peninsular Campaigns and Waterloo, a project that at first glance seems neither novel nor particularly necessary. What the author has done, however, is to give a critical rereading to the writings of the long-standing authorities on the period, Napier, Oman, and Fortescue, together with the sources they cited. The result is an attempt to overcome the "stereotyped" characterization of the contrast so often "drawn between Wellington as a general and as a man, the one admirable and the other repellent."

Davies makes no attempt in his scant 150-odd pages to retell the story of battles and sieges. Instead his aim is to avoid "rehashing these thorny questions" in favor of developing a picture of Wellington as he appeared to those under his command. The attempt rings true since as the author points out "preference is given to the criticism or praise that is strictly contemporary whenever it is available." Especially noteworthy is his critical habit of showing the reader how, on many occasions, quotes taken out of context have been used to provide proof of preconceived prejudices.

Wellington emerges from this reexamination as the practical soldier he was when he led England's armies, respected by most, revered by some, beloved by few, but in all respects a man of his times. Davies' Iron Duke is not the awesome, somewhat asinine, and oftentimes pathetic figure created by a web of fact, fancy, and jaundiced hindsight woven in the years following Waterloo. Wellington's Tory excursions into the fields of politics and military administration during an age of reform have no part in coloring this largely contemporary portrait.

Almost as an afterthought, Davies has included chapters on the officers and men, amusements and recreations, and wives and children of the armies under Wellington. This reviewer for one hopes

that this short appetizer is merely the forerunner of a meaty main course. There is a need here for a work comparable to Bell Wiley's Civil War studies, *The Life of Johnny Reb* (Indianapolis, 1943) and *The Life of Billy Yank* (Indianapolis, 1951), which will examine the raw material of a group Wellington called "an unrivalled army for fighting," yet characterized on at least one occasion as the "scum of the earth."

Wellington and His Army will be a happy find to the tyro who is introduced in succinct English to this fascinating field of military history. For the jaded veteran student, this book will bring a freshening of mind to spark his reading and research. A vote of thanks is due The Huntington Library for again lending us the thought-provoking pen of Godfrey Davies and making *Wellington and His Army* available to American readers.

In a different sense Mrs. Woodham-Smith's new book, *The Reason Why*, which bids fair to become a best seller, also provokes one to additional research. Throughout almost all of this ably-written volume the character of Wellington is omnipresent. His influence on the development of the army and the selection of its leaders is acknowledged as paramount. Mrs. Woodham-Smith's Wellington is the man of the post-Waterloo era, acknowledged by her to have been "a military genius, perhaps the greatest in history, and unsurpassed as a military administrator."

Perhaps this quotation is the key to the flaw that this reviewer feels is present in *The Reason Why*. The book, being written for a wider audience than the usual diminutive military history group, suffers from a fault quite common in popular writings. The story is a contrast of black and white, hero and villain, the absolutely right or the completely wrong. The nuances of grey that pervade life are often missing.

Mrs. Woodham-Smith has indicated the extensive research she has accomplished to put this story together in her foreword and bibliography. Because the text is not footnoted, an act that probably assures its place in the popular category, there is ample opportunity for speculation as to the location and credibility of many of the quotes used by the authoress. If an historian sets out to prove a point, especially a competent historian-biographer, the point will be proved all the more easily if there is no necessity for pinpointing authorities. Even authorities are subject to manipulation and interpretation. Godfrey Davies gave a convincing demonstration of this by supplying the "missing

links" in quotes used by Oman in his study of the Peninsular Campaigns.

Despite what may seem like excessively carping criticism and a confirmed suspicious nature when it comes to uncited history texts, the reviewer enjoyed *The Reason Why*. The development of the characters of Lord's Lucan and Cardigan, from their earliest acquaintance with the military through their subsequent leadership of cavalry in the Crimea, is excellently done. Since the book is primarily a biography of these two officers, the military background of the period comes to light mainly when it touches their lives. These glimpses are fascinating. In particular, the explanation of the system of purchase of commissions is revealing, especially for the reader unacquainted with the history of that unique and influential institution.

The theme of Mrs. Woodham-Smith that the Charge of the Light Brigade came about because of deficiencies in the character of its leader (Cardigan) and instigator (Lucan) is well developed. It remains for the reader himself to ascertain if he is satisfied with this explanation. Whether he is or not, *The Reason Why* will at the very least furnish some pleasant hours of reading and at its best open up new vistas of thought on a neglected point of military history.

HENRY I. SHAW, JR.
Historical Branch, G-3
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Washington, D. C.

The Royal Irish Fusiliers, 1793-1950. By Marcus Cunliffe. (London, New York, Toronto: Oxford University Press, 1953. Pp. xvi, 517. Illus. Maps. \$8.50.)

In this handsome book Mr. Cunliffe gives the reader a chance to watch the Fusiliers from their first recruitment in 1793 during the troubled times of the first coalition against the revolutionary French to the day in 1950 when a regimental chapel in their honor was dedicated in the Cathedral Church of Saint Patrick in Armagh. Nevertheless the reader must be aware that this is more than a regimental history—that it is a review of British wars and of British imperial ventures. For the Royal Irish Fusiliers were everywhere: in Flanders in 1794; in the West Indies, South America, Mauritius, India and the Peninsula in the Napoleonic Wars; in Canada in 1812-1815; in India at the time of the great Sepoy Mutiny; in the Crimea; in China, Egypt, and South Africa in the last half of the nineteenth century; in France,

Macedonia and Palestine in World War I; in Malta, Sicily, North Africa and Italy during World War II.

Mr. Cunliffe's analysis of the causes of the War of 1812 is well phrased and keen. He assesses carefully the arguments in the United States Congress for neutral rights on the sea and weighs them with the expansionist desire for Canada. The general American strategy of the war and the specific engagements in which the Fusiliers took part are graphically described.

The author has prepared a readable and scholarly account of interest both to military experts and to general historians, and has placed considerable valuable but perhaps less pertinent material in several appendices. He has provided an index to officers and men of the regiment as mentioned in the text as well as a general index. The illustrations and the maps make the book pleasant to read and possess.

DOROTHY D. GONDOS
The American University

The Midget Raiders. By C. E. T. Warren and James Benson. (New York: William Sloane Associates, 1954. Pp. 318, \$4.50.)

In World War II, the British found valuable enemy warships moored in protective harbors which could be made the objective for midget submarines.

In developing this David versus Goliath style of combat, the Royal Navy expended a substantial amount of effort and, if not repaid by large numbers of sunken enemy warships, was amply repaid in the valor and individual bravery of the gallant men.

Their story progresses logically from the first development work on the midget submarine. Succeeding chapters relate the hairbreadth successes and failure of this heroic group of expendables in the European, Mediterranean, and Far Eastern theatres.

Their prize: The unsuspecting fleet of the enemy anchored in a safe harbor behind anti-submarine nets was a rich one but the odds were too long and too hazardous. Under slightly different circumstances the prize might have been won and the naval course of World War II might have been altered substantially.

CAPTAIN SAMUEL G. KELLY, USN (Rtd)

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"The Evolution of the Tunic of the Staff of the British Army, 1855-1939, by Major N. P. Daunay, in *Journal of The Society for Army Historical Research*, (London), Autumn 1954.

"Civil War Carbines", by C. Meade Patterson and Cuddy DeMarco, Jr., in *American Rifleman* December 1931, January 1955.

"Early Small Arms", by Col. B. R. Lewis, in *Ordnance*, January-February 1955.

"The Story of Ignition", by Herschel C. Logan, in *American Rifleman*, January 1955.

"Impact of Atomic Warfare on Airborne Operations", by Lt. Col. Norman E. Martin, in *Military Review*, January 1955.

"The Story of Army Uniforms", by Lt. Col. Robert H. Rankin, in *The National Guardsman*, March, April 1954., (From the beginning to the Civil War.)

"Red Armor", by Garrett Underhill, in *Marine Corps Gazette*, April 1955.

"Individual Decorations of the Confederacy", by John Wike, in *Military Collector & Historian* December 1954.

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HEADQUARTERS GAZETTE

MILITARY AFFAIRS ON MICROFILM

The Board of Trustees of the American Military Institute is happy to report that the entire file (Vol. I, No. 1 through Vol. XVIII, No. 4) of its quarterly journal is now safely on microfilm, and that copies of the same (in whole or in part) may be readily obtained for moderate charges, from the Library of Congress. The negative remains in the care of the Library, both as a permanent record and as a source of copies.

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these documents available to interested researchers. Individuals may satisfy their need for the material by ordering film strips or, if no microfilm reader is available, by ordering photoprints.

DEFENSE SEMINAR AT HARVARD

A Seminar in Defense Policy and Administration in the United States was inaugurated at Harvard University during the 1954 academic year. Its success has warranted its continuation this year. The seminar, which meets each Tuesday for a two hour session, is a joint offering of the Graduate School of Public Administration and the Law School of the University. Professor W. Barton Leach has general responsibility, but other professors of the University as well as knowledgeable outside persons are called in to conduct sessions. Defense policy problems studied and discussed are such items as the origin and amendments to the National Security Act, the method and content of the Defense Budget, the division of function between the Congress and the Executive and between the Defense Department and other executive agencies, Administrative problems in relation to specific current issues, the missions and forces of the three military services, and the like.

The seminar operates at the information level of an open congressional committee hearing. Guest lecturers speak "off the record," to enhance the frankness of discussion. Seminar membership is generally limited to twenty students. The students are in the age group 21-25, and are candidates for advanced degrees in government or economics, or are enrolled in the Law School or Business School, or are holders of Nieman

Fellowships in Journalism. The Secretaries and Undersecretaries of the Army, the Navy, and the Air Force, as well as leading publishers, congressmen, and businessmen have taken part in the seminar sessions.

In addition to the foregoing, an excellent course in military history is conducted at Harvard by Colonel T. N. Dupuy, Professor of Military Science and Tactics, who may be reached at Shannon Hall, 28 Divinity Place, Cambridge 38, Massachusetts.

CIVIL WAR ROUND TABLE

Spring Program

The late winter and spring program of the CWRT of the District of Columbia was as good as ever, and that is "plenty good." At the January 11 meeting Virgil C. Jones gave a preview of his forthcoming book *Guerillas vs. Union Life Lines*. As usual he gave a "bang-up" address to a capacity crowd. The activities of four major partisan leaders were covered in Pat Jones' talk: John H. McNeill in West Virginia; Elijah V. White along the Potomac and in Maryland; Harry Gilmer in the Shenandoah Valley; and, of course, John S. Mosby nearer Washington.

Francis Wilshin unrolled the drama of the Vicksburg Campaign at the dinner meeting of February 8, in the Army Navy Club. In addition to maps, Mr. Wilshin projected slides of both wartime and present day scenes in and around the battlefield. Amongst the guests were John C. Pemberton and Major General U. S. Grant III, grandsons of the two military leaders who faced each other in the 47-day siege of Vicksburg in 1863. Mr. Pemberton, a New York attorney spoke briefly but poignantly about his grandfather, voicing his hope that future historians would re-examine the Vicksburg Campaign and assess General Pemberton in the meritorious light he deserves.

The usual capacity crowd at the March 8 meeting listened to Major Marshall An-

drews speak on "The Iron Horse on the Washington Battlefront." A veteran of World Wars I and II and war correspondent in Korea, Major Andrews gave a very interesting account of the errors and mishaps that attended early efforts to use the railways for military purposes. A group of distinguished railroad officials and general officers of the Army also attended. This affair was followed with the immensely successful Gold Medal Award Dinner to Bruce Catton, April 12, 1955, details of which are separately chronicled.

Admiral John B. Heffernan, the CWRT president for 1955, played the stellar role at the May 10 meeting, rendering a stirring account of a great maritime hero, Raphael Semmes, barrister, brilliant sea raider, and acting-brigadier general at Appomattox. The annual meeting and election of officers preceded the Admiral's address. The season's program was concluded with the annual spring field trip, the tour of the Spotsylvania battlefield on Saturday, May 21. Well over one hundred persons gathered at the National Park Service Museum in Fredericksburg, Va., at 9 a.m. Saturday, and were guided around the battlefield area by our old friend, Francis Wilshin, the NPS Historian.

THIRD GOLD MEDAL AWARD DINNER

The SRO sign was hung out at the National Press Club on the evening of April 12, 1955, when Bruce Catton, distinguished past president of the Washington CWRT, and presently Editor of *The American Heritage*, was invested with the now famous Gold Medal. A brilliant assemblage of 350 ladies and gentlemen, amongst whom were many top ranking civil and military officers and Members of Congress, gathered to pay tribute to our Pulitzer Prize winning fellow member.

One of the outstanding features of the evening was the presence of General Philip

Sheridan's three daughters, the Misses Mary, Irene, and Louise Sheridan, who reside near the circle graced with Gutzon Borglum's lifelike statue of the great Union cavalry leader mounted on his almost equally famous horse, Rienzi. After General Carl A. Baehr presented Author Catton with the Round Table's Gold Medal for his classic trilogy on the Army of the Potomac, Mr. Catton gave the speech of the evening which was a stirring account of Sheridan's great victory at Five Forks in the closing days of the war. The audience listened with rapt attention and gave the speaker a rising ovation.

Mr. Ralph Donnelly and his assistants deserve all praise for the plans and preparations for the most outstanding meeting held thus far by the Washington CWRT.

NECROLOGY

GENERAL SUMMERALL

General Charles Pelot Summerall, former Chief of Staff of the United States Army, died at Walter Reed Hospital, Washington, D. C., 14 May 1955. The famed old soldier of World War I was 88 years of age, and had been at Walter Reed for nearly a year past. Born at Lake City, Florida, 4 March 1867, the future general graduated from West Point in 1892, receiving a commission in the infantry, but transferred the following year to the artillery. He served in the Philippine campaigns of 1898-99, in the Boxer Rebellion Expedition of 1900-01, where he blew open the gates of the Imperial City, clearing a path for the 14th Infantry, and in World War I as a brigadier general he commanded successively the 67th and the 1st Field Artillery Brigades. In the latter stages of the war, as major general, he commanded the First Division and then the Fifth Corps. After the war General Summerall served in various commands until his selection as Chief of Staff, in 1926, when he became the sixth

officer on the active list to hold the four-star rank.

In 1931, after retiring from the Army, General Summerall began a new career as an educator, accepting the presidency of one of the South's most famous military colleges, The Citadel at Charleston, South Carolina.

COLONEL CALVIN H. GODDARD

Military history suffered a genuine loss on 22 February 1955, when Colonel Calvin H. Goddard died in Washington, D. C. Former chief of both the Ordnance and Medical Corps historical offices, Colonel Goddard was a man of many talents and much useful service, as will be evident in the memorial article by his friend and colleague, Dr. Donald O. Wagner, Chief Historian, Medical Corps Historical Unit, which he is preparing for a later issue of *Military Affairs*. The American Military Institute salutes the memory of the departed member and friend.

GENERAL KREGER

The American Military Institute suffered the loss of a charter member when Major General Edward Albert Kreger died 24 May 1955, at Brooke Army Hospital, San Antonio, Texas. General Kreger, who was within a week of his 87th year, was born near Keota, Iowa, 31 May 1868. After graduation from Iowa State College he was admitted to the Iowa bar in 1897. After seeing service as a captain and major in the Iowa National Guard he was commissioned in the Regular Army in 1908, and was professor of law at West Point from 1914 to 1917. In 1920, he supervised the preparation of the Army's manual for courts-martial. General Kreger achieved the capstone of his career when he served as Judge Advocate General of the Army from 16 November 1928 to 28 February 1931, when he was retired for disability. General Kreger was buried in Fort Sam Houston National Cemetery.

EDITORIAL



MILITARY HISTORIANS AND DEPARTMENTAL HISTORIES

WHAT are the uses of history? What constitutes the legitimacy of historical endeavor? Is it possible to write the kind of history that can be used? These are questions asked of military historians by the profession they serve. They are also questions that bothered the distinguished historian, Marc Bloch, who lived and died making history. Bloch served in the French Army through World War I and again during the debacle of 1940. He was executed for underground activity in 1944, leaving an unfinished testament of his faith in the validity of history.¹

Bloch gives his profession some advice. History, he claims, must have some of the characteristics of poetry. It must appeal to the emotions as well as satisfy the intellect. He chides historians for not having the confidence of their colleagues in the laboratory. He warns against setting up rules that license the craft, and criticizes overspecialization. To him, history is the science of men in time, and the only justifications for its compartmentalization are the limitations of mind and the short span of life.

Military historians might ask themselves if their work meets these criteria, especially that about specializing. Is the division of military history controlled by geographical considerations, by limits of professional capacity, or by departmental lines? World War II was fought by theaters and in each case the capabilities of all arms were employed. But the history of that war is being written separately with each service giving stress to its own work and only cursory treatment to that of others. Such particularizing

is proper in essentially monographic work. When the method is used for broad descriptive volumes, it achieves unreality.

At best this method makes our military history a coarse mixture rather than the compound it should be. At the other extreme, it provides an overemphasis that causes blind spots in military thinking. It is now generally admitted that the U. S. Navy's obsession with the fleet action at the Battle of Jutland was in part responsible for its being unready mentally for its antisubmarine and amphibious roles in World War II. From analogy the question may be asked whether the comprehensive German Army histories of World War I had a similar effect on the German General Staff to the extent that it failed to appreciate the larger scene of World War II. Finally, does the contemporary nature of aviation history mean that all principles of air warfare are new?

The writing of interpretive World War II history will not be easy. There are no letters, diaries or Journals, and participants were not encouraged to write memoirs. The future historian's main sources will be records. Those available are voluminous and he will give us little thanks unless we give him some help in the way of sorting and calendering them and in reproducing the more important. Such work will provide the foundation for future interpretive history. The *Official Records* of the Union and Confederate Armies and Navies are demonstrating this today.

The burden is on the trained historian to convince his military colleague that this work had better be done if the latter's contribution is to be properly interpreted by future generations.

¹Marc Bloch, *The Historian's Craft (Apologie pour l'Histoire, ou Metier d'Historien.)* New York, A. A. Knopf, 1953.

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MONCADO AWARD LUNCHEON

AT a luncheon meeting of the American Military Institute, held at the Naval Gun Factory Officers Club, Washington, D. C. 26 May 1955, presided over by Rear Admiral John D. Hayes, USN, Ret., the results of the 1954 competition for the Moncado Book Fund Award were announced by Dr. Henry M. Dater, chairman of the Award Committee.

The award, carrying a cash prize of two hundred dollars, was bestowed on Dr. Otis A. Singletary of Austin, Texas, for an unpublished manuscript entitled "The Negro Militia Movement During Radical Reconstruction." Certificates of Honorable Mention were also awarded to Dr. James L. Nichols of Nacogdoches, Texas, for "The Organization and Operation of the Confederate Engineer Department," and to Colonel Robert Arthur, USA, Ret., of New Orleans, Louisiana, for "Washington and Cornwallis at Yorktown." In announcing the award and the certificates, Dr. Dater gave brief biographical accounts of the recipients and sketched the method of selection of manuscripts and the objective of the Mon-

cado Award in promoting scholarly research, writing, and publishing in the field of American military history.

Dr. Singletary is on the history faculty of the University of Texas, while Dr. Nichols is a member of the Department of History at Stephen F. Austin State College, Nacogdoches, Texas. Colonel Arthur is a former Chief of the Historical Section, Army War College, and the author of two books, *The Coast Artillery School, 1824-1927*, and the definitive *History of Fort Monroe*. Present among the half hundred luncheoneers were several authors of publications hot off the presses: Brigadier General Dale O. Smith, USAF, author of *U. S. Military Doctrine*; Dr. Eugene Bacon and Major C. J. Bernardo, joint authors of a *History of American Military Policy* who were introduced by Dr. Tibor Kerekes of Georgetown University; and Dr. Stefan Possony, editor of *Air Power and National Security* in the May 1955 *Annals of The American Academy of Political and Social Science*. Dr. Bryce Wood spoke briefly about the program of awards of The Social Science Research Council.

The aim of the American Military Institute is the encouragement of the serious study of all aspects of military (including naval and air) history. In the furtherance of this end the income from funds donated by Hilario Camino Moncado has been set aside to award biennially a cash prize for an original book-length manuscript in any field of United States military history. Manuscripts will be judged on the basis of thoroughness of research and quality of presentation as well as originality of contribution.

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